# II. MORBIDITY

# A. INFECTIOUS DISEASES

**Background**

Vaccines are among the most effective and reliable of methods to prevent and control disease. Every year, they prevent countless serious illnesses and thousands of possible deaths. About 100 million vaccine doses are given annually in the United States, most of them to infants and children as part of their routine immunization schedule. A single dose of some vaccines gives nearly complete protection. With others, a series of doses spread over months or years is needed for the best results.

Children in particular are beneficiaries of the protection from illnesses that vaccines offer. Currently, there are ten diseases from which children are routinely protected through the use of standard childhood immunizations. These diseases are: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, Haemophilus influenzae B (bacterial meningitis), and varicella (chicken pox). Enormous reductions have been seen in each of these serious diseases since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the United States in 1941, but only 86 cases in 2000. Louisiana had no reported cases of measles in 2000.

Although the public is most familiar with the vaccines used for childhood immunization, there are many others that afford protection to individuals at risk of infection from other types of exposures. Examples are the hepatitis A vaccine, which is available to select populations, such as travelers to areas where the disease is endemic, and the meningococcal vaccine, which is available to select populations, such as college students living in dormitories.

In addition to being reliable and effective, vaccines are also one of the most cost-effective medical procedures available. The ten vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very effective. Cost estimates show that each dollar spent on immunization saves $10-$12 in direct medical and hospitalization costs. These estimates do not include attendant costs, such as workdays lost by family members, costs for outbreak control, or the burden of lives lost to these severe diseases. A prime example is measles, which leads to the hospitalization of approximately 10% of those who become ill. Even with excellent medical care, approximately 1 out of every 1,000 cases dies, usually from measles infection of the lungs and of the brain.

The diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact, such as coughing, to others who are not immune. In countries where childhood immunization against pertussis has been stopped, there have been large outbreaks of whooping cough. The number of pertussis cases reported in Louisiana for Year 2000 more than doubled from the total in 1999 (10 cases in 1999 vs. 21 cases in 2000). Diphtheria, another dangerous infection, which has been

controlled through childhood immunization, has not been seen in Louisiana since 1972. However, in recent years, epidemics of diphtheria occurred in Eastern Europe and Asia. Without immunization, re-introduction of diphtheria and other vaccine-preventable diseases into Louisiana via an infected person can contribute to an increase in the number of cases with subsequent development in clusters and outbreaks.

**2000 Status**

Hepatitis A (HAV) is a viral disease that affects the liver. The number of hepatitis A cases in Louisiana for the year 2000, decreased by 49.8% when compared to 1999. The Louisiana case rate was 2.5 per 100,000. Sex- race specific rates were highest among black males (4.8 per 100,000) followed by black females (3.5 per 100,000). The highest incident rates among age groups were among those 5-9 years old (3.6 per 100,000) and 20-24 years old (3.6 per 100,000).

Risk factor information was available for 60% of the cases. Approximately 2% of the cases reported were children in a daycare. Among the cases that responded to risk factor information, 9% indicated that they had a household exposure to a known hepatitis A case. Parishes reporting the highest case rates include Orleans (11 per 100,000), Red River (11 per 100,000), and Bossier (7 per 100,000).

*Hepatitis B* (HBV) is a serious public health problem that affects people of all ages in the United States and around the world. Each year an estimated 300,000 people become infected with the hepatitis B virus in the United States. Hepatitis B is a virus that attacks the liver causing disease. A person can get hepatitis B by direct contact with the blood or body fluids of an infected person. A baby can get hepatitis B from an infected mother during childbirth. Symptoms of hepatitis B include yellowing of the skin or eyes, loss of appetite, nausea, vomiting, fever, extreme tiredness, and stomach pain.

The most effective means of preventing hepatitis B infection is to be immunized with the hepatitis B vaccine. Research is also being carried out on drugs that have the potential for improving treatment of chronic hepatitis.

In the year 2000, cases of hepatitis B in Louisiana decreased by 9.3% relative to 1999. The sex specific rates remain higher for males than females (4.3 per 100,000 versus 2.8 per 100,000). Blacks continue to have higher rates of hepatitis B in Louisiana when compared to whites (6.4 versus 1.2 per 100,000). The majority of cases (24%) occurred among those 25-34 years of age.

Among those that responded to questions regarding risk factor information, less than one percent indicated intravenous drug use within the previous six weeks to six months (prior to the onset of illness). Eighteen percent responded that they had not used IV drugs, and the remaining 80% “did not know”. In the previous six months, 9.3% of respondents had indicated that they had one sexual partner, 6.2% responded that they had 2 to 5 partners, while less than one percent had more than 5 partners. The majority of respondents (81.5%) had listed “unknown” for the number of partners within the past six

months. Among those indicating sexual preference, 18% classified themselves as heterosexual, less than one percent as homosexual, and 81.5% listed "unknown" for sexual preference. Three percent of the respondents had received a tattoo within the previous six months.

*Hepatitis C* is a viral disease that causes liver inflammation and can lead to cirrhosis and cancer of the liver. It is a disease growing in magnitude in the United States: an estimated 3.9 million (1.8%) Americans have been infected with HCV, of whom 2.7 million are chronically infected. There are approximately 36,000 new infections diagnosed in the United States each year, of which 25-30% are symptomatic. Symptoms of hepatitis C are often non-specific, but may include jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, and vomiting. Persons at increased risk of contracting hepatitis C include injecting drug users, people having sex with infected persons, persons with multiple sex partners, recipients of blood transfusions before July 1992, health care workers exposed to blood, and infants born to infected women. While there is no vaccine available to prevent hepatitis C, antiviral drugs such as interferon used alone or in combination with ribavirin are approved for the treatment of persons with chronic hepatitis C.

In 2000, 457 cases (10.6 per 100,000) of hepatitis C were reported in Louisiana. This represents a 32.6% increase from the previous year. Louisiana's case rate for hepatitis C is 10 times higher than the national rate (10.6 versus 1.2 per 100,000). Sex-specific rates were highest among males (15.6 versus 5.4 per 100,000). Blacks had higher rates of hepatitis C (16.3 per 100,000) than whites (6.3 per 100,000). The majority of cases (39%) occurred in the 35 to 44 year age group.

*Pertussis (whooping cough)* is a respiratory illness that can affect all age groups, but mostly is found in infants and young children. It is caused by a bacterium called *Bordetella pertussis*. These bacteria are present in the mouths and noses of infected people. Pertussis symptoms are the usual cold symptoms, which then develop into coughing fits with a high-pitched "whooping" sound. Pertussis can be fatal in infants. Immunization against pertussis involves five doses of the DTaP (diphtheria, tetanus, and acellular pertussis) combination vaccination starting at age two months. There were 21 cases reported in 2000, which is an increase of 100% from 1999 (10 cases). Females accounted for 53% of the reported cases while males accounted for 47%. Fifty-three percent of the cases were white versus 26% for blacks. Eleven children less than five years old accounted for the majority of the cases. Five cases were between five and 19 years of age while one case occurred in the 55 to 65 year age group. Five cases were up to date for age with the DTP (diphtheria, tetanus, and pertussis) vaccine, two cases were too young to have been vaccinated, and five cases had unknown vaccination histories. Six cases were hospitalized. Eight cases were reported to have coughing episodes and of these cases, six manifested characteristic whooping cough. No cases were associated with daycare.

*Mumps* is a viral respiratory disease that causes swelling and pain of salivary glands in the face and neck. Mumps is spread by contact with infected people. This disease is contagious from one to two days before and until seven days after symptoms appear. It is most infectious when the swelling starts. The symptoms are fever, pain in front of the ears that increases during chewing, and swollen glands in the cheeks and sometimes under the jaw. It is most likely to affect children ages five to nine, but may occur at any age. It is likely to be more serious and painful in teenagers and adults.

Immunization against mumps involves two doses of MMR (measles, mumps and rubella) vaccine, usually at age twelve months and at four to six years.

In the year 2000, 5 cases of mumps were reported, a decrease of 55% from 1999. Three cases were male and two cases were female; 80% of the cases were less than 14 years of age. Cases were distributed throughout Louisiana with no parish reporting more than two cases.

**Selected Infectious Diseases Counts**
**Louisiana 1995-2000**

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|
| Hepatitis A | 196 | 261 | 266 | 173 | 213 | 107 |
| Hepatitis B | 244 | 209 | 208 | 219 | 172 | 156 |
| Hepatitis C | 222 | 290 | 276 | 137 | 302 | 457 |
| Pertussis | 22 | 15 | 22 | 13 | 10 | 21 |
| Mumps | 15 | 24 | 18 | 9 | 11 | 5 |

Source: Louisiana Office of Public Health, Infectious Disease Epidemiology Program

**Selected Infectious Diseases by Parish**
**Louisiana, 2000**

| Parish | Hepatitis A+ | Hepatitis B+ | Hepatitis C+ | Measles | Mumps | Pertussis | Rubella | Total |
|---|---|---|---|---|---|---|---|---|
| State Total | 107 | 156 | 457 | 0 | 5 | 21 | * | 747 |
| Acadia | * | * | * | 0 | 0 | 0 | 0 | * |
| Allen | 0 | * | * | 0 | 0 | 0 | 0 | * |
| Ascension | * | * | * | 0 | 0 | * | 0 | 6 |
| Assumption | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avoyelles | * | * | * | 0 | 0 | 0 | 0 | * |
| Beauregard | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Bienville | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Bossier | 6 | * | 6 | 0 | 0 | 0 | 0 | 15 |
| Caddo | * | 7 | 26 | 0 | 0 | * | 0 | 39 |
| Calcasieu | * | 5 | 59 | 0 | 0 | * | 0 | 66 |
| Caldwell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cameron | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Catahoula | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Claiborne | 0 | * | 0 | 0 | 0 | 0 | 0 | * |
| Concordia | 0 | 0 | 0 | 0 | 0 | * | 0 | * |
| DeSoto | 0 | * | * | 0 | 0 | * | 0 | * |
| East Baton Rouge | 5 | 9 | 27 | 0 | * | * | 0 | 44 |
| E. Carroll | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Feliciana | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Evangeline | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Franklin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Selected Infectious Diseases by Parish<br>Louisiana, 2000 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Parish | Hepatitis A+ | Hepatitis B+ | Hepatitis C+ | Measles | Mumps | Pertussis | Rubella | Total |
| Iberia | 0 | * | * | 0 | 0 | 0 | 0 | * |
| Iberville | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Jackson | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jefferson | 10 | 21 | 51 | 0 | 0 | * | 0 | 85 |
| Jefferson Davis | * | * | * | 0 | 0 | 0 | 0 | * |
| Lafayette | * | 0 | 11 | 0 | 0 | 0 | 0 | 14 |
| Lafourche | * | * | * | 0 | * | * | 0 | 7 |
| Lasalle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lincoln | 0 | 0 | 0 | 0 | 0 | * | 0 | * |
| Livingston | 0 | * | 6 | 0 | 0 | 0 | 0 | 7 |
| Madison | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Morehouse | 0 | * | * | 0 | 0 | * | 0 | * |
| Natchitoches | 0 | * | 0 | 0 | 0 | 0 | 0 | * |
| Orleans | 56 | 59 | 164 | 0 | 0 | 0 | 0 | 279 |
| Ouachita | 0 | * | * | 0 | 0 | 0 | 0 | * |
| Plaquemines | 0 | * | * | 0 | 0 | 0 | 0 | * |
| Pointe Coupee | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| Rapides | * | * | 0 | 0 | 0 | 0 | * | * |
| Red River | * | 0 | 0 | 0 | 0 | 0 | 0 | * |
| Richland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sabine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| St. Bernard | 0 | * | 24 | 0 | * | 0 | 0 | 27 |
| St. Charles | * | * | * | 0 | 0 | 0 | 0 | * |
| St. Helena | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| St. James | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| St. John | 0 | 0 | 0 | 0 | 0 | * | 0 | * |
| St. Landry | 0 | * | 5 | 0 | 0 | 0 | 0 | 7 |
| St. Martin | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| St. Mary | 0 | 0 | * | 0 | 0 | 0 | 0 | * |
| St. Tammany | * | * | 6 | 0 | 0 | * | 0 | 14 |
| Tangipahoa | 0 | * | * | 0 | 0 | 0 | 0 | 6 |
| Tensas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Terrebonne | * | 0 | * | 0 | * | 0 | 0 | 7 |
| Union | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermilion | * | 5 | * | 0 | 0 | 0 | 0 | 10 |
| Vernon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Washington | * | * | * | 0 | 0 | 0 | 0 | 9 |
| Webster | 0 | * | * | 0 | 0 | 0 | 0 | * |
| W. Baton Rouge | 0 | * | * | 0 | 0 | 0 | 0 | * |
| West Carroll | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Feliciana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Winn | * | * | * | 0 | 0 | * | 0 | * |

Source: Louisiana Office of Public Health, Infectious Disease Epidemiology Program

+Parish of Residence is unknown for some cases

* in cell refers to counts greater than 0 but less than 5.

## B. TUBERCULOSIS

***Background***

Pulmonary tuberculosis (TB) results from infection with an organism named mycobacterium tuberculosis. Persons with TB may transmit the organism by coughing. If untreated, the pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs; it can also occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six months of therapy with a single anti-TB drug called isoniazid, or INH.

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as HIV. Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e. length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

**2001 Status**

Louisiana reported 294 cases of TB in 2001, for a case rate of 6.6 per 100,000 people. This represents a 11.2% decrease from the 2000 figure of 331 cases (7.4 per 100,000) and a 17.6% decrease since the 1999 report of 357 cases (8.2 per 100,000). However, trends should be interpreted with caution as decreases over such a short period do not necessarily reflect a trend in tuberculosis control.

***Tuberculosis Case Counts Louisiana, 1997-2001***

| *1997* | *1998* | *1999* | *2000* | *2001* |
|---|---|---|---|---|
| 406 | 380 | 357 | 331 | 294 |

Source: Louisiana Office of Public Health, Tuberculosis Program

In 2001, Louisiana's state ranking for TB case rates (cases per 100,000) was the 8th highest in the nation. Louisiana's 2001 rate was similar to those in neighboring states but was significantly higher than the national rate of 5.6 per 100,000. The national rate for 2001 declined 2% from 2000.

***Tuberculosis Cases and Rates****

***Louisiana and Neighboring States, 2000***

| State | Number of Cases | Case Rate |
|---|---|---|
| *Alabama* | 265 | 5.9 |
| *Arkansas* | 162 | 6.0 |
| *Louisiana* | 294 | 6.6 |
| *Mississippi* | 173 | 5.4 |
| *Texas* | 1643 | 7.7 |
| *United States* | 15,991 | 5.6 |

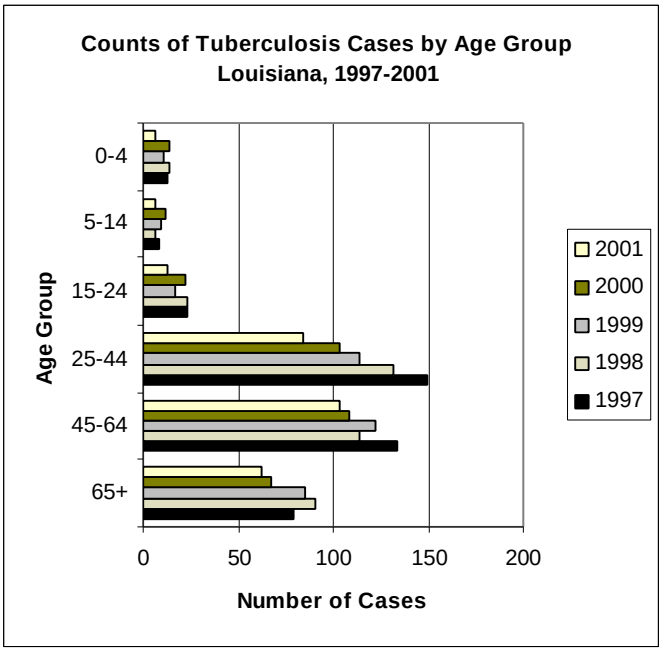
*Rate per 100,000 population

Source: Louisiana Office of Public Health, Tuberculosis Program

National Surveillance System, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Drug-resistant TB continues to be a problem in Louisiana. While no cases of multi-drug-resistant tuberculosis (MDR-TB) were reported in 2001, the incidence of single-drug (INH) resistance continues at 2%, the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB is 4%.

As shown in the following graph, increases in the number of reported cases of TB were observed in younger age groups (below age 25 years), and decreases were seen in all other age groups.




Source: Louisiana Office of Public Health, Tuberculosis Program

***Louisiana Tuberculosis Cases and Rates***
***By Region and Parish, 2001***

***State Total = 331***
***State Case Rate = 7.6 per 100,000***

| *Region/Parish* | *Cases* | *Rate/100,000* |
|---|---|---|
| *Region 1* | 134 | 13.4 |
| *Jefferson* | 32 | 7.1 |
| *Orleans* | 97 | 21.0 |
| *Plaquemines* | 0 | 0.0 |
| *St Bernard* | 5 | 7.6 |
| *Region 2* | 25 | 4.3 |
| *Ascension* | * | 1.4 |
| *East Baton Rouge* | 17 | 4.3 |
| *East Feliciana* | 3 | 14.2 |
| *Iberville* | * | 3.2 |
| *Pointe Coupee* | * | 8.5 |
| *West Baton Rouge* | * | 4.9 |
| *West Feliciana* | 0 | 0.0 |

## Louisiana Tuberculosis Cases and Rates By Region and Parish, 2001

**State Total = 331**
**State Case Rate = 7.6 per 100,000**

| Region/Parish | Cases | Rate/100,000 |
|---|---|---|
| Region 3 | 19 | 4.9 |
| Assumption | 0 | 0.0 |
| Lafourche | * | 4.5 |
| St Charles | * | 6.2 |
| St James | 0 | 0.0 |
| St John | * | 7.1 |
| St Mary | * | 7.0 |
| Terrebonne | 5 | 4.8 |
| Region 4 | 40 | 7.4 |
| Acadia | * | 3.5 |
| Evangeline | * | 11.7 |
| Iberia | * | 1.4 |
| Lafayette | 20 | 10.7 |
| St Landry | 9 | 10.7 |
| St Martin | 0 | 0.0 |
| Vermilion | * | 7.7 |
| Region 5 | 17 | 6.1 |
| Allen | 0 | 0.0 |
| Beauregard | 0 | 0.0 |
| Calcasieu | 14 | 7.8 |
| Cameron | 0 | 0.0 |
| Jefferson Davis | * | 9.5 |
| Region 6 | 13 | 4.3 |
| Avoyelles | 0 | 0.0 |
| Catahoula | 0 | 0.0 |
| Concordia | * | 9.7 |
| Grant | * | 5.2 |
| LaSalle | * | 7.3 |
| Rapides | 6 | 4.7 |
| Vernon | * | 3.9 |
| Winn | * | 5.7 |
| Region 7 | 37 | 7.3 |
| Bienville | * | 12.7 |
| Bossier | * | 3.2 |
| Caddo | 26 | 10.8 |
| Claiborne | 0 | 0.0 |
| DeSoto | 0 | 0.0 |
| Natchitoches | 0 | 0.0 |
| Red River | 0 | 0.0 |
| Sabine | * | 4.2 |
| Webster | 5 | 11.7 |

**Louisiana Tuberculosis Cases and Rates**
**By Region and Parish, 2001**

**State Total = 331**
**State Case Rate = 7.6 per 100,000**

| Region/Parish | Cases | Rate/100,000 |
|---|---|---|
| Region 8 | 30 | 8.6 |
| Caldwell | 0 | 0.0 |
| East Carroll | * | 11.5 |
| Franklin | * | 4.5 |
| Jackson | 0 | 0.0 |
| Lincoln | 5 | 12.2 |
| Madison | * | 23.1 |
| Morehouse | 5 | 16.0 |
| Ouachita | 13 | 8.9 |
| Richland | * | 4.7 |
| Tensas | 0 | 0.0 |
| Union | * | 4.5 |
| West Carroll | 0 | 0.0 |
| Region 9 | 16 | 3.7 |
| Livingston | * | 3.3 |
| St Helena | * | 10.4 |
| St Tammany | * | 1.0 |
| Tangipahoa | 8 | 8.1 |
| Washington | * | 4.6 |

*In cell refers to count greater than 0 and less than 5.

Source: Louisiana Office of Public Health, Tuberculosis Program

# C. SEXUALLY TRANSMITTED DISEASES

## Overview

Sexually transmitted diseases (STD's) are the most commonly reported diseases in the United States and affect almost 15.3 million Americans in all population groups each year. By age 21, one in five young adults will have received treatment for an STD. Among the most serious complications are pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects.[1]

***STD Rates* and National Rankings*****
***Louisiana, 1997-2001***

| Year | Primary and Secondary Syphilis | | Gonorrhea | | Chlamydia | |
|---|---|---|---|---|---|---|
| | Rate | Rank | Rate | Rank | Rate | Rank |
| *1997* | 8.4 | 7 | 247.8 | 5 | 265.4 | 7 |
| *1998* | 9.9 | 3 | 287.2 | 4 | 349.0 | 5 |
| *1999* | 7.0 | 3 | 301.9 | 3 | 380.8 | 4 |
| *2000* | 4.8 | 8 | 302.9 | 2 | 408.2 | 3 |
| *2001* | 4.0 | - | 291.0 | - | 423.0 | - |

***Rates per 100,000 population 1990***

**States ranked from highest to lowest disease incidence. Nationwide ranks for 2001 currently not available.

Sources: Louisiana Office of Public Health, STD Control Program 2001

CDC STD Surveillance Report 2000

## Syphilis

Syphilis infections are caused by *treponema pallidum*, a spirochete (bacteria). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days) and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and condylomata lata, sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which persons have no clinical signs or symptoms.

Louisiana had the 7th highest rate of syphilis nationwide during 1997; then in 1998 and 1999 rose to the 3rd highest rate. In 2000 the rate dropped to the 8th highest. The total number of reported cases of early syphilis (primary, secondary, and early latent syphilis) is consistently declining, from 5,373 cases in 1993, to 367 cases in 2001. In 2001, 47.7% of early syphilis cases occurred in females, and 87.2% of the cases occurred in blacks. Sixty four percent of early syphilis cases occurred among the 15-34 year-old population. During the last five years, sharp and consistent declines in early syphilis rates have occurred. In the white population, the rate increased from 2 to 3 per 100,000 between 1997 and 1998, remained 3 per 100,000 in 1999, and decreased to 2 per 100,000 in 2000 and 2001. In blacks, the rate decreased

[1] National Center for Health Statistics. *Healthy People 2000 Review, 1997*. Hyattsville, Maryland: Public Health Service. 1997.

from 65 to 61 per 100,000 between 1997 and 1998, dropped to 48 per 100,000 in 1999, down to 28 per 100,000 in 2000 and down to 25 per 100,000 in 2001.

**Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Sex and Race**
**Louisiana, 1997-2001**

| Year | White | | | Black | | | Other | | |
|---|---|---|---|---|---|---|---|---|---|
| | Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 1997 | 2.0 | 2.0 | 2.0 | 61.0 | 68.0 | 65.0 | 2.0 | 2.0 | 2.0 |
| 1998 | 3.0 | 3.0 | 3.0 | 64.0 | 58.0 | 61.0 | 10.0 | 7.0 | 9.0 |
| 1999 | 3.0 | 3.0 | 3.0 | 48.0 | 47.0 | 48.0 | 0.0 | 7.0 | 4.0 |
| 2000 | 2.0 | 3.0 | 2.0 | 32.0 | 26.0 | 28.0 | 0.0 | 2.0 | 1.0 |
| 2001 | 2.0 | 1.0 | 2.0 | 27.0 | 23.0 | 25.0 | 0.0 | 5.0 | 2.0 |

*Rate per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program 2001

The Louisiana incidence rate for primary and secondary syphilis for 2000 was 4.8 per 100,000 people (Census 1990), and the national rate was 2.2. *The Healthy People 2000 Review 1997* objective for primary and secondary syphilis is to reduce the incidence rate to no more than 4 cases per 100,000 people and the incidence among blacks to no more than 30 cases per 100,000.

**Primary and Secondary Syphillis Rates***
**Louisiana, Neighboring States, and United States, 1996-2000**

| State | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Alabama | 12.3 | 9.5 | 6.3 | 4.6 | 2.8 |
| Arkansas | 10.5 | 6.9 | 4.3 | 3.4 | 4.1 |
| Louisiana | 12.3 | 8.4 | 9.8 | 7.0 | 4.8 |
| Mississippi | 30.1 | 14.3 | 9.5 | 7.0 | 4.9 |
| Texas | 4.7 | 3.5 | 2.2 | 2.4 | 2.0 |
| United States | 4.3 | 3.2 | 2.6 | 2.4 | 2.2 |

*Rate per 100,000 population 1990

Source: CDC STD Surveillance Report 2000

**Gonorrhea**

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and they include genital, anorectal, and pharyngeal infections.

Louisiana had the 5th highest rate of gonorrhea nationwide in 1997, the 4th highest in 1998, and to the 3rd highest in 1999 and 2000. The total number of reported cases of gonorrhea had been increasing (mainly due to improved laboratory reporting) from 10,761 in 1997 to 13,265 in 2000. In 2001 the total number of reported cases decreased to 12,288. In 2001, 49.3% of the cases of gonorrhea occurred in females; 86.8% of cases occurred in blacks; 26.7% of the cases occurred among teens 15-19 year old, and 38.1% of the cases occurred among 20-24 year olds.

| Gonorrhea Rates* by Sex and Race<br>Louisiana, Neighboring States, and United States, 1997-2001 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | White | | | Black | | | Other | | |
| Year | Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 1997 | 17.0 | 36.0 | 27.0 | 833.0 | 615.0 | 717.0 | 66.0 | 88.0 | 78.0 |
| 1998 | 19.0 | 35.0 | 28.0 | 958.0 | 757.0 | 851.0 | 49.0 | 124.0 | 88.0 |
| 1999 | 25.0 | 48.0 | 37.0 | 966.0 | 792.0 | 874.0 | 41.0 | 63.0 | 52.0 |
| 2000 | 22.0 | 39.0 | 31.0 | 1019.0 | 780.0 | 892.0 | 22.0 | 32.0 | 27.0 |
| 2001 | 23.0 | 40.0 | 31.0 | 929.0 | 727.0 | 821.0 | 17.0 | 46.0 | 32.0 |

*Rate per 100,000 population 1990
Source: Louisiana Office of Public Health, STD Control Program 2001

The Louisiana incidence rate of gonorrhea for 2000 was 302.9 per 100,000 population (Census 1990), and the national rate for 2000 was 131.6. *The Healthy People 2000 Review 1997* objective for gonorrhea, was to reduce the rate to: a) an incidence of no more than 100 cases per 100,000 people; b) an incidence of no more than 650 cases per 100,000 among Blacks; c) an incidence of no more than 375 per 100,000 persons age 15-19, and d) an incidence of no more than 175 per 100,000 persons age 15-44.

| Gonorrhea Rates*<br>Louisiana, Neighboring States, and United States, 1996-2000 | | | | | |
|---|---|---|---|---|---|
| State | 1996 | 1997 | 1998 | 1999 | 2000 |
| Alabama | 307.2 | 278.5 | 292.7 | 249.2 | 276.0 |
| Arkansas | 201.7 | 173.7 | 155.7 | 126.4 | 142.7 |
| Louisiana | 214.6 | 247.8 | 286.1 | 301.7 | 302.9 |
| Mississippi | 257.8 | 343.1 | 388.4 | 376.0 | 332.9 |
| Texas | 121.1 | 136.9 | 166.2 | 164.2 | 164.2 |
| United states | 123.2 | 122.0 | 131.6 | 132.0 | 131.6 |

*Rate per 100,000 population
Source: CDC STD Surveillance Report 2000

**Chlamydia**

Infection caused by *Chlamydia trachomatis* is among the most prevalent STD's in the United States. Therapy for these infections is commonly based on the clinical syndrome, or as simultaneous treatment for gonorrhea.

Louisiana had the 7th highest rate of chlamydia nationwide in 1997. In 1998 went up to the 5th highest rate, up to the 4th in 1999, and up to the 3rd highest rate in 2000. Since 1997, the number of reported cases of chlamydia has been increasing. The total number of reported cases of chlamydia was 11,512 in 1997, rose to 15,305 reported cases in 1998, to 16,573 in 1999, 17,921 in 2000, and slightly down to 17,859 in 2001. In 2001, 80.5% of reported cases of chlamydia occurred in females; 75.3% of cases occurred in Blacks; 36.3% of cases among 15-19 year-olds, and 40.4% among 20-24 year-olds.

The Louisiana chlamydia rate for 2000 was 408.2 per 100,000 population (Census 1990), and the national rate for 2000 was 257.5. *The Healthy People 2000 Review 1997* objective for chlamydia trachomatis infections is to reduce the prevalence in women under 25 years of age to no more than 5% (as measured by a decrease in the prevalence of chlamydia infection among family planning clients).

**Chlamydia Rates* by Sex and Race**
**Louisiana, 1997-2001**

| | White | | | Black | | | Other | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 1997 | 17.0 | 36.0 | 27.0 | 833.0 | 615.0 | 717.0 | 66.0 | 88.0 | 78.0 |
| 1998 | 25.0 | 125.0 | 76.0 | 411.0 | 1360.0 | 919.0 | 71.0 | 278.0 | 174.0 |
| 1999 | 30.0 | 141.0 | 87.0 | 448.0 | 1369.0 | 941.0 | 24.0 | 198.0 | 111.0 |
| 2000 | 27.0 | 140.0 | 85.0 | 518.0 | 1477.0 | 1031.0 | 12.0 | 115.0 | 63.0 |
| 2001 | 28.0 | 145.0 | 88.0 | 457.0 | 1539.0 | 1035.0 | 22.0 | 90.0 | 56.0 |

*Rate per 100,000 population 1990
Source: Louisiana Office of Public Health, STD Control Program 2001

**Chlamydia Rates***
**Louisiana, Neighboring States, and United States, 1996-2000**

| State | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Alabama | 193.7 | 201.5 | 231.3 | 283.2 | 350.7 |
| Arkansas | 84.2 | 99.2 | 162.4 | 229.9 | 243.8 |
| Louisiana | 253.9 | 265.3 | 347.6 | 380.5 | 408.2 |
| Mississippi | 178.8 | 367.0 | 385.7 | 417.0 | 458.6 |
| Texas | 225.3 | 260.7 | 305.9 | 314.1 | 343.3 |
| United States | 192.9 | 207 | 234.2 | 251.6 | 257.5 |

*Rate per 100,000 population
Source: CDC STD Surveillance Report 2000

**Sexually Transmitted Disease Rates[+] by Parish**
**Louisiana, 2001**

| Parish | Early Syphilis (Primary, Secondary, and Early Latent) | Gonorrhea | Chlamydia |
|---|---|---|---|
| State Total | 9.0 | 291.0 | 423.0 |
| Acadia | 0.0 | 41.0 | 150.0 |
| Allen | 0.0 | 75.0 | 278.0 |
| Ascension | 3.0 | 84.0 | 148.0 |
| Assumption | 4.0 | 110.0 | 255.0 |
| Avoyelles | 3.0 | 82.0 | 207.0 |
| Beauregard | 3.0 | 96.0 | 226.0 |
| Bienville | 13.0 | 163.0 | 350.0 |
| Bossier | 0.0 | 216.0 | 417.0 |
| Caddo | 2.0 | 753.0 | 931.0 |
| Calcasieu | 12.0 | 215.0 | 347.0 |
| Caldwell | 0.0 | 92.0 | 204.0 |
| Cameron | 0.0 | 86.0 | 151.0 |
| Catahoula | 0.0 | 99.0 | 244.0 |
| Claiborne | 0.0 | 259.0 | 327.0 |
| Concordia | 0.0 | 163.0 | 211.0 |
| DeSoto | 0.0 | 288.0 | 477.0 |
| East Baton Rouge | 31.0 | 386.0 | 506.0 |

| Sexually Transmitted Disease Rates[+] by Parish<br>Louisiana, 2001 | | | |
|---|---|---|---|
| Parish | Early Syphilis (Primary, Secondary, and Early Latent) | Gonorrhea | Chlamydia |
| East Carroll | 0.0 | 299.0 | 566.0 |
| East Feliciana | 42.0 | 62.0 | 172.0 |
| Evangeline | 0.0 | 108.0 | 313.0 |
| Franklin | 0.0 | 183.0 | 331.0 |
| Grant | 0.0 | 17.0 | 120.0 |
| Iberia | 22.0 | 365.0 | 732.0 |
| Iberville | 10.0 | 174.0 | 712.0 |
| Jackson | 0.0 | 178.0 | 318.0 |
| Jefferson | 3.0 | 99.0 | 191.0 |
| Jefferson Davis | 0.0 | 126.0 | 225.0 |
| Lafayette | 12.0 | 225.0 | 375.0 |
| Lafourche | 9.0 | 102.0 | 165.0 |
| LaSalle | 0.0 | 15.0 | 22.0 |
| Lincoln | 0.0 | 390.0 | 402.0 |
| Livingston | 3.0 | 28.0 | 98.0 |
| Madison | 0.0 | 209.0 | 497.0 |
| Morehouse | 3.0 | 395.0 | 438.0 |
| Natchitoches | 0.0 | 431.0 | 839.0 |
| Orleans | 12.0 | 715.0 | 885.0 |
| Ouachita | 8.0 | 366.0 | 491.0 |
| Plaquemines | 0.0 | 63.0 | 47.0 |
| Pointe Coupee | 9.0 | 257.0 | 444.0 |
| Rapides | 4.0 | 302.0 | 434.0 |
| Red River | 0.0 | 565.0 | 927.0 |
| Richland | 5.0 | 257.0 | 427.0 |
| Sabine | 0.0 | 102.0 | 216.0 |
| St. Bernard | 0.0 | 66.0 | 110.0 |
| St. Charles | 2.0 | 47.0 | 181.0 |
| St. Helena | 0.0 | 101.0 | 415.0 |
| St. James | 14.0 | 77.0 | 244.0 |
| St. John | 8.0 | 108.0 | 245.0 |
| St. Landry | 6.0 | 181.0 | 349.0 |
| St. Martin | 20.0 | 130.0 | 152.0 |
| St. Mary | 3.0 | 131.0 | 303.0 |
| St. Tammany | 2.0 | 94.0 | 116.0 |
| Tangipahoa | 8.0 | 303.0 | 518.0 |
| Tensas | 0.0 | 14.0 | 84.0 |
| Terrebonne | 26.0 | 213.0 | 330.0 |
| Union | 0.0 | 130.0 | 295.0 |
| Vermilion | 0.0 | 92.0 | 98.0 |
| Vernon | 5.0 | 52.0 | 176.0 |
| Washington | 5.0 | 178.0 | 206.0 |
| Webster | 0.0 | 219.0 | 310.0 |
| West Baton Rouge | 15.0 | 57.0 | 247.0 |
| West Carroll | 0.0 | 124.0 | 190.0 |
| West Feliciana | 31.0 | 54.0 | 139.0 |
| Winn | 0.0 | 98.0 | 234.0 |

[+]Rate per 100,000 population 1990

*In cell refers to counts greater than 0 but less than 5.

Source: Louisiana Office of Public Health, STD Control Program 2001

# D. HIV/AIDS

**Background**

AIDS (Acquired Immunodeficiency Syndrome) is caused by the *human immunodeficiency virus*, or HIV. People infected with HIV can develop many health problems, including extreme weight loss, severe pneumonia, cancer, and damage to the nervous system. These illnesses signal the onset of AIDS. The time at which symptoms first begin to appear varies from person to person. In some people these illnesses may develop within a year or two, others may remain asymptomatic for 10 years or more. Although recent advances in treatment have significantly slowed the progression from HIV to AIDS and AIDS to death, there is still no cure for AIDS. This means that the most effective way to curb the HIV/AIDS epidemic is through the provision of HIV prevention interventions and improved access to treatment and other services for HIV-infected persons.

The epidemic continues to greatly impact public health in Louisiana and will make growing demands on health and social service systems for many decades. The lifetime medical cost for caring for a person with AIDS is over $100,000, most of which is paid by the government. Every year, new infections obligate Louisiana to approximately $120 million in future medical costs.

**Summary**

As of December 31, 2000, there were 12,708 persons reported to be living with HIV/AIDS in Louisiana. In 2000 alone, 805 new AIDS cases were diagnosed and 1,130 new HIV cases were detected and reported. New cases of HIV/AIDS were detected in 55 of Louisiana's 64 parishes in 2000. The HIV detection rate among blacks remains disproportionately high. In 2000, 75% of newly-detected HIV/AIDS cases and 74% of newly-diagnosed AIDS cases were among blacks. The 2000 HIV detection rate for blacks was over six times higher than among whites.

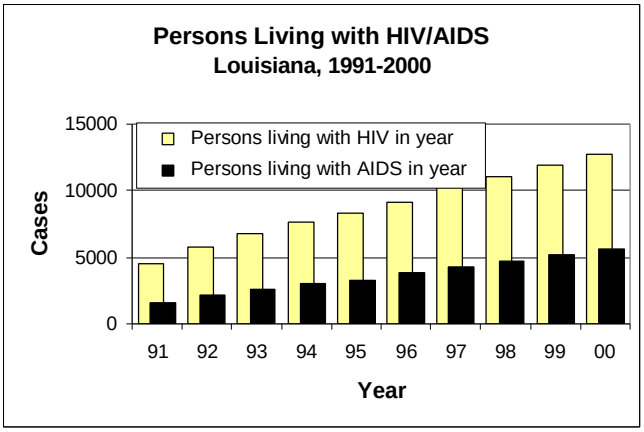
Overall, it is estimated that the numbers of new infections each year are now similar among men who have sex with men (MSM) and high-risk heterosexuals. For blacks, high-risk heterosexual activity has become the leading exposure categor while, among whites, the predominant exposure is MSM. AIDS-related mortality began to decline dramatically in 1996, coinciding with the emergence of more effective treatments; however, the number of AIDS-related deaths appears to be stabilizing. The transmission of HIV from mothers to their infants has dropped dramatically in Louisiana, from over 25% in 1993 to 6% in 1999.

**2000 Status**

New highly active antiretroviral therapies (HAART), which have been shown to be effective in the treatment of HIV infection, have altered the natural history of HIV infection. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death among many people infected with HIV.

Due to the widespread use of these new HIV treatments, Louisiana, as well as the rest of the nation, has seen yearly declines in both the number of new AIDS cases diagnosed and AIDS-related deaths.

However, in 2000 as in 1999, Louisiana ranked 10th highest in AIDS case rates and 17th in the number of new AIDS cases reported in the United States. Louisiana's AIDS case rate continues to be higher than most neighboring states; with the exception of Mississippi, which had the same AIDS case rate as Louisiana.




Source: Louisiana Office of Public Health: HIV/AIDS Program

***AIDS Cases and Rates***
***Louisiana, Neighboring States, and United States, 1998-2000***

| State | 1998 | | 1999 | | 2000 | | Cumulative Totals | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases | Rate/ 100,000 | Cases | Rate/ 100,000 | Cases | Rate/ 100,000 | Adults | Children less than 13 | Total |
| *Alabama* | 484 | 11.1 | 476 | 10.9 | 483 | 10.9 | 6,198 | 72 | 6,270 |
| *Arkansas* | 203 | 8.0 | 194 | 7.6 | 194 | 7.3 | 2,939 | 38 | 2,977 |
| *Louisiana* | 951 | 21.8 | 854 | 19.5 | 679 | 15.2 | 12,520 | 125 | 12,645 |
| *Mississippi* | 415 | 15.1 | 421 | 15.2 | 431 | 15.2 | 4,411 | 55 | 4,466 |
| *Texas* | 3,967 | 20.1 | 3,181 | 15.9 | 2,667 | 12.8 | 53,607 | 380 | 53,987 |
| *United States* | 48,269 | 17.6 | 46,400 | 16.7 | 40,660 | 14.4 | 73,9897 | 8,496 | 748,393 |

In 2000, the Baton Rouge region surpassed the New Orleans region in the number of AIDS cases diagnosed per population. The AIDS case rates in both the metropolitan Baton Rouge area and the metropolitan New Orleans area ranked among the 20 highest for large cities in the nation. AIDS cases were diagnosed in every region in Louisiana in 2000.

**Persons Living with HIV/AIDS**

The decline in morbidity and mortality has led to an increase in the number of persons living with HIV/AIDS. The number of persons living with HIV in Louisiana continues to increase each year. As of December 2000, a total of 12,708 persons in Louisiana were known to be living with HIV/AIDS, including 149 cases in children under 15. These numbers reflect only those persons who were confidentially tested and reported to the health department. Thus, these numbers certainly underestimate the total number of persons infected with HIV in Louisiana and should be considered only minimum estimates. As the number of persons living with HIV continues to increase, more resources will need to be directed toward programs and services that address prevention, early detection, and effective treatment.

Currently, there are persons living with HIV/AIDS in every parish in Louisiana. As of the end of 2000, nine parishes had greater than 300 persons living with HIV per 100,000 persons living in the parish. The

HIV/AIDS Program has funded community-based organizations in every region of the state to deliver HIV prevention programs to persons at high risk and to provide services for persons with HIV/AIDS.

**Persons Living with HIV/AIDS by Parish**
**Louisiana, December 2000**

| Parish | Persons Living with HIV/AIDS | Parish | Persons Living with HIV/AIDS |
|---|---|---|---|
| Statewide | 12,708 | Region VI | 565 |
| | | Avoyelles | 143 |
| Region I | 5992 | Catahoula | 11 |
| Jefferson | 1041 | Concordia | 18 |
| Orleans | 4848 | Grant | 12 |
| Plaquemines | 20 | Lasalle | * |
| St.Bernard | 83 | Rapides | 277 |
| | | Vernon | 49 |
| Region II | 2628 | Winn | 51 |
| Ascension | 78 | | |
| East Baton Rouge | 2092 | Region VII | 783 |
| East Feliciana | 87 | Bienville | 14 |
| Iberville | 138 | Bossier | 77 |
| Pointe Coupee | 31 | Caddo | 542 |
| West Baton Rouge | 78 | Claiborne | 41 |
| West Feliciana | 124 | Desoto | 14 |
| | | Natchitoches | 48 |
| Region III | 369 | Red River | 7 |
| Assumption | 15 | Sabine | 11 |
| Lafourche | 55 | Webster | 29 |
| St.Charles | 54 | | |
| St.James | 36 | Region VIII | 573 |
| St.John the Baptist | 52 | Caldwell | 8 |
| St.Mary | 48 | East Carroll | 22 |
| Terrebonne | 109 | Franklin | 11 |
| | | Jackson | 5 |
| Region IV | 747 | Lincoln | 35 |
| Acadia | 52 | Madison | 36 |
| Evangeline | 24 | Morehouse | 38 |
| Iberia | 60 | Ouachita | 336 |
| Lafayette | 395 | Richland | 36 |
| St.Landry | 113 | Tensas | 17 |
| St.Martin | 54 | Union | 18 |
| Vermilion | 49 | West Carroll | 11 |
| | | | |
| Region V | 539 | Region IX | 512 |
| Allen | 115 | Livingston | 78 |
| Beauregard | 38 | St.Helena | 5 |
| Calcasieu | 350 | St.Tammany | 200 |
| Cameron | * | Tangipahoa | 123 |
| Jefferson Davis | 32 | Washington | 106 |

*In cell refers to counts greater than 0 and less than 5.

2000 Louisiana HIV/AIDS Surveillance Report - Louisiana Office of Public Health

**Shifts in the Epidemic**

In keeping with national trends, over the last decade Louisiana has seen a shift in the HIV/AIDS epidemic among women, minorities, and high-risk heterosexuals. HIV/AIDS has been on a steady rise in the heterosexual population. The percentage of persons living with HIV/AIDS, who likely contracted their infection through high-risk heterosexual contact, increased from 7% in 1990 to an estimated 26% in 2000.

Although the majority of all cases continue to be in men who have sex with men, the proportion of cases attributable to high-risk heterosexual contact is increasing.

Blacks continue to be disproportionately impacted by HIV/AIDS. In 2000, 75% of newly detected HIV/AIDS cases were among blacks, while blacks comprise only 33% of the population. The 2000 HIV detection rate among blacks was over six times higher than the rate among whites and three times higher than the rate among hispanics.

The percentage of newly detected HIV/AIDS cases reported among women in Louisiana has been increasing steadily. In 1993, 21% of all cases were women, and in 2000, 34% of all new cases detected were women. Black women accounted for 89% of all new HIV/AIDS cases in women detected in 2000.

***Newly-detected HIV/AIDS Cases, by Demographics and Exposure Group***
***Louisiana, 1994-2000***

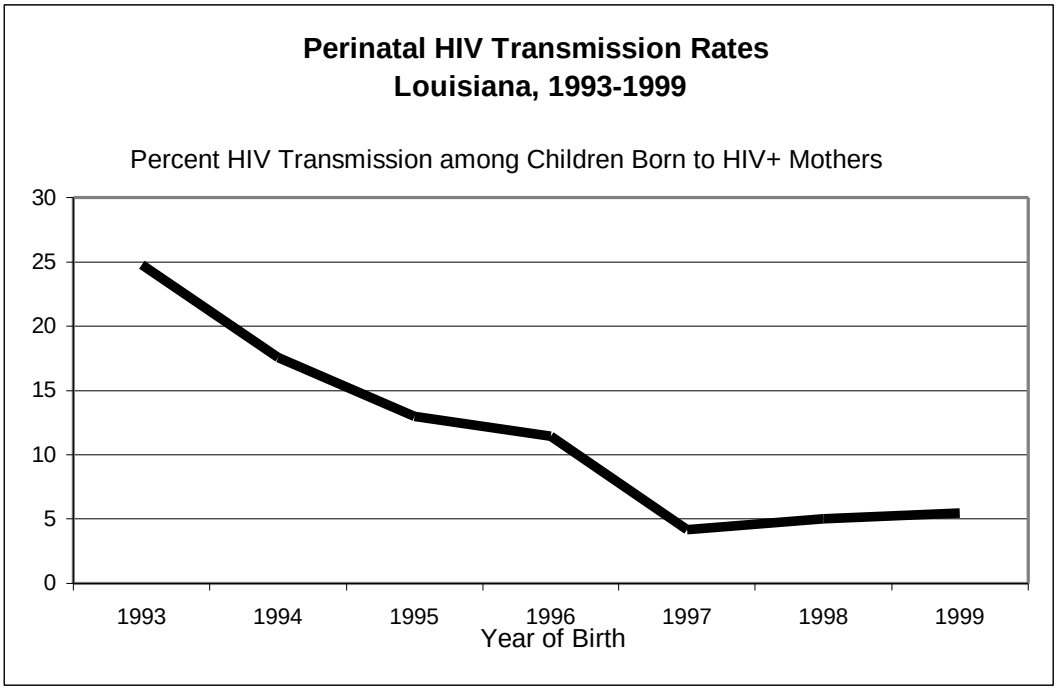
| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|
| *Total Living Cases* | 1,709 | 1,516 | 1,591 | 1,560 | 1,319 | 1,286 | 1,130 |
| *Gender* | | | | | | | |
| *Male* | 75% | 74% | 71% | 70% | 68% | 70% | 66% |
| *Female* | 25% | 26% | 29% | 30% | 32% | 30% | 34% |
| *Ethnicity* | | | | | | | |
| *Black* | 67% | 68% | 70% | 71% | 74% | 73% | 75% |
| *White* | 30% | 29% | 27% | 26% | 24% | 24% | 22% |
| *Other* | 2% | 2% | 3% | 3% | 3% | 2% | 2% |
| *Unknown* | <1% | <1% | <1% | <1% | <1% | 1% | <1% |
| *Exposure Group* | | | | | | | |
| *Cases with Specified Risk* | 1,315 | 1,104 | 1,033 | 929 | 755 | 615 | 486 |
| *MSM** | 48% | 47% | 47% | 45% | 45% | 48% | 48% |
| *IDU** | 29% | 28% | 28% | 27% | 27% | 26% | 22% |
| *HRH** | 20% | 21% | 22% | 25% | 26% | 23% | 26% |
| *Transf/Hemo** | 1% | 2% | 1% | 1% | 2% | 1% | 2% |
| *Perinatal* | 2% | 2% | 2% | 2% | 1% | 1% | 2% |

* MSM: Men who have Sex with Men; IDU: Injection Drug Users (non-MSM); HRH: High Risk Heterosexual; Transf/Hemo: Transfusion/Transplant/Hemophiliac

Source: Louisiana Office of Public Health, HIV/AIDS Program

**Perinatal HIV Transmission**

Despite the increasing number of women infected with HIV, the number of pediatric HIV/AIDS cases (children diagnosed when younger than thirteen years of age) has been decreasing in recent years. Perinatal transmission rates have dropped dramatically from over 25% in 1993 to 6% in 1999. This decline is credited to improved treatment protocols for HIV-infected pregnant women and increased use of antiretroviral therapy during pregnancy and delivery. The HIV/AIDS Program's Perinatal Prevention Program continues to work with medical centers and providers around the state to reinforce the importance of offering HIV counseling and testing to all pregnant women, and early diagnosis and treatment for HIV-infected pregnant women.


Perinatal HIV Transmission Rates
Louisiana, 1993-1999
Percent HIV Transmission among Children Born to HIV+ Mothers
30
25
20
15
10
5
0
1993
1994
1995
1996
1997
1998
1999
Year of Birth

# E. CANCER

### 1995-1999 Status

According to the American Cancer Society, one in every four deaths in the United States is attributable to cancer. Although more people are surviving cancer now than ever before, this trend is not true for all groups. Survival rates can vary according to race, age-group, and type of cancer.

***Five Most Common Cancers***
***Louisiana, 1995-1999***
***(Five-Year Case Counts)***

| *Type* | *Number of Cases* |
|---|---|
| *All Cancers* | 94,946 |
| *Lung* | 16,314 |
| *Prostate* | 14.185 |
| *Breast* | 13,605 |
| *Colon & Rectum* | 11,353 |
| *Bladder* | 3,679 |

Source: Louisiana Tumor Registry

Cancer presents in different forms and is associated with a variety of risk factors. Several prevalent forms of cancer can be either prevented or diagnosed early enough to prevent spread to other organs. Preventive measures can significantly reduce the risk of many cancers. The National Cancer Institute estimates that tobacco accounts for 30% of cancer deaths, and dietary factors account for another 35%. Thus, most of the lung cancers can be prevented by not smoking, and consuming diets low in fat and high in fiber may help prevent colon, rectal, breast, prostate and other cancers.

Early detection is also important in lowering the rate of deaths due to cancer. Mammography, clinical breast examination, Pap tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) aid in early detection and treatment of cancers in their early stages. These procedures also prevent spreading of existing cancers. Nonetheless, a significant portion of the population at risk for various cancers fail to participate in screening procedures[2].

[2] *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.

## Five Most Common Cancers In Louisiana Males, 1995-1999

| Whites | | Blacks | | Total * | |
|---|---|---|---|---|---|
| Type | Rate** | Type | Rate** | Type | Number |
| All Cancers | 486.3 | All Cancers | 570.8 | All Cancers | 50,537 |
| Prostate | 131.7 | Prostate | 187.4 | Prostate | 14,185 |
| Lung | 94.8 | Lung | 126.5 | Lung | 10,134 |
| Colon & Rectum | 58.1 | Colon & Rectum | 59.3 | Colon & Rectum | 5,861 |
| Bladder | 30.5 | Oral Cavity & Pharynx | 18.7 | Bladder | 2,696 |
| Non-Hodgkin's Lymphoma | 18.9 | Stomach | 17.9 | Non-Hodgkin's Lymphoma | 1,796 |

* All races combined. Case counts cover five years.

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population.

Source: Louisiana Tumor Registry

## Five Most Common Cancers In Louisiana Females, 1995-1999

| Whites | | Blacks | | Total * | |
|---|---|---|---|---|---|
| Type | Rate** | Type | Rate** | Type | Number |
| All Cancers | 333.2 | All Cancers | 322.7 | All Cancers | 44,409 |
| Breast | 104.9 | Breast | 94.2 | Breast | 13,446 |
| Lung | 48.5 | Colon & Rectum | 42.5 | Lung | 6,180 |
| Colon & Rectum | 37.1 | Lung | 41.5 | Colon & Rectum | 5,492 |
| Corpus Uteri | 14.7 | Cervix Uteri | 15.2 | Corpus Uteri | 1,870 |
| Non-Hodgkin's Lymphoma | 13.8 | Corpus Uteri | 13.7 | Non-Hodgkin's Lymphoma | 1,700 |

* All races combined. Case counts cover five years.

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population.

Source: Louisiana Tumor Registry

***Background***[3]

*Breast cancer* is the most frequently occurring invasive cancer among women in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer decreased significantly during the 1990s, with the largest declines among younger women. Certain factors—such as family history, exposure to hormones, reproduction issues, and excessive alcohol use—can influence the risk for breast cancer. The association between the intake of diets high in fat and increased breast cancer incidence has not been firmly established. It has recently been discovered that alterations in two genes can account for most inherited breast cancer, which constitutes 5-10% of all breast cancers. Early detection improves the chances of survival, and the National Cancer Institute recommended in 1997 that women in their forties or older undergo screening mammograms on a regular basis, every year. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms and how often to be screened.

*Cervical cancer (cervix uteri)* afflicts 13,000 women each year. Increased use of the Pap test has contributed to an almost 50 percent drop in cervical cancer deaths since 1973. Women who are or have been sexually active or have reached age 18 should have Pap tests and physical exams regularly.

*Colorectal cancer* was the second leading cause of cancer deaths in 1995-1999, although both incidence and mortality rates have been declining. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables and fiber and low in fat appears to reduce the risk of colorectal cancer, and exercise may also lower risk for this cancer. Research suggests that increased screening and polyp removal has contributed to the reduction in the impact of this disease.

*Kidney cancer* accounted for approximately 2% of all new 1995-1999 cancers in the U.S. Obesity, cigarette smoking, and abuse of analgesics have been linked to increased risk for this disease while beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors. About one third of renal cell cancers and more than one half of renal pelvis and ureter cancers could be avoided by eliminating the use of tobacco.

*Leukemias* together accounted for 2.5% of the total 1995-1999 cancer incidence in the U.S. and almost one-third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among whites than blacks.

*Lung cancer* is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat. In 1995-1999 lung cancer caused approximately 30% of all cancer deaths. Smoking is

*3* From National Cancer Institute (NCI) and American Cancer Society resources and publications. Statistics quoted pertain to the United States.

responsible for 85% of lung cancers. The risk of dying as a result of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Smoking rates rose significantly among high school students from 1991 to 1999, but this increasing trend may have leveled off.

*Melanoma of the skin* incidence rates have increased dramatically over the last several decades. This form of skin cancer represented only about 5% of all forms of skin cancers reported in 1995-1999 in the U.S. but was responsible for about 75% of all skin cancer deaths. Earlier diagnoses of melanoma of the skin have increased survival rates however the total mortality rate continues to rise gradually with the increase in incidence. Risk factors include excessive exposure to ultraviolet radiation, occupational exposures, family history, and multiple or atypical moles.

*Non-Hodgkin's lymphoma* cases have been increasing continuously but inexplicably over the past several decades, but the rate of increase apparently slowed in the 1990s. Part of this increase is due to AIDS-related cases. Risk factors involve, in part, reduced immune function and exposure to certain infectious agents. Occupational exposures to certain chemicals are also suspected.

*Cancer of the oral cavity & the pharynx* accounted for approximately 2.5% of all malignancies in 1995-1999. In Americans, oral cancer is 2-3 times more common among males than females. Tobacco and alcohol account for approximately three-fourths of all oral cancers in the U.S. Epidemiological evidence indicates that while smoking and drinking are independent risk factors, their combination increases risk of cancer. Use of snuff is a primary cause of cancers of the gum and cheek. Although not as prevalent as cigarette smoking, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as that for cigarette smoking.

*Ovarian cancer* strikes almost 13,000 women every year. Currently, the five-year survival rate is approximately 50%. Reproductive history, family history, and oral contraceptives have been linked to the incidence of ovarian cancer. As is the case for almost all cancers, the risk increases with age.

*Pancreatic cancer* is called a "silent" disease, as it is asymptomatic until well advanced. Survival is poor; only about 5% of patients are alive five years after diagnosis. In 1995-1999 it ranked 10$^{th}$ for incidence of all cancers in the U.S. for but was fourth for cancer mortality. Little is known about the etiology of pancreatic cancer, and the only established risk factor is cigarette smoking.

*Prostate cancer* is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. Increasingly, evidence points to diet, particularly animal fat, in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle

factors. The National Cancer Institute (NCI) is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) reduces mortality.

*Urinary bladder cancer* was the 4th most common type of cancer between 1995-1999 among American men and the 8th most common among American women. It is especially prevalent among older white men. Since the late 1980s, incidence and mortality rates have generally declined. The most important known risk factor is cigarette smoking; smokers demonstrate 2-3 times the risk of non-smokers. Several occupational exposures increase the risk for bladder cancer. Despite pervious speculation, research shows that neither artificial sweeteners nor coffee drinking appear to increase the risk of cancer.

*Uterine cancer (corpus uteri),* the fourth most common cancer in U.S. women, accounted for approximately 6% of all cancer cases among women between 1995-1999. However, a limited number of deaths results from this disease, as reflected in a high five-year survival rate of 84%. High cumulative exposure to estrogen is the major risk factor for the most common type of cancer of the uterine corpus, and low parity and obesity are also linked to this disease.

***Note on Statistics***

In the following tables describing cancer incidence in Louisiana, disease counts encompass a five-year period. This evens out natural fluctuations in cancer incidence and allows a more reliable identification of the cancers that are of most concern in Louisiana.

***Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999***

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| State Total | All Cancers | 94,946 | All Cancers | 50,537 | All Cancers | 44,409 |
| | Lung | 16,314 | Prostate | 14,185 | Breast | 13,446 |
| | Prostate | 14,185 | Lung | 10,134 | Lung | 6,180 |
| | Breast | 13,605 | Colon & Rectum | 5,861 | Colon & Rectum | 5,492 |
| | Colon & Rectum | 11,353 | Bladder | 2,696 | Corpus Uteri | 1,870 |
| | Bladder | 3,679 | Non-Hodgkin's | 1,796 | Non-Hodgkin's Lymphoma | 1,700 |
| Region 1 | All Cancers | 23,452 | All Cancers | 12,020 | All Cancers | 11,432 |
| | Lung | 4,057 | Prostate | 3,163 | Breast | 3,504 |
| | Breast | 3,540 | Lung | 2,394 | Lung | 1,663 |
| | Prostate | 3,163 | Colon & Rectum | 1,395 | Colon & Rectum | 1,416 |
| | Colon & Rectum | 2,811 | Bladder | 679 | Corpus Uteri | 447 |
| | Bladder | 944 | Non-Hodgkin's Lymphoma | 481 | Non-Hodgkin's Lymphoma | 400 |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Jefferson | All Cancers | 10,229 | All Cancers | 5,195 | All Cancers | 5,034 |
| | Lung | 1,741 | Prostate | 1,358 | Breast | 1,540 |
| | Breast | 1,555 | Lung | 996 | Lung | 745 |
| | Prostate | 1,358 | Colon & Rectum | 609 | Colon & Rectum | 599 |
| | Colon & Rectum | 1,208 | Bladder | 338 | Non-Hodgkin's Lymphoma | 206 |
| | Bladder | 447 | Non-Hodgkin's Lymphoma | 230 | Corpus Uteri | 203 |
| Orleans | All Cancers | 11,037 | All Cancers | 5,686 | All Cancers | 5,351 |
| | Lung | 1,861 | Prostate | 1,554 | Breast | 1,671 |
| | Breast | 1,687 | Lung | 1,131 | Lung | 730 |
| | Prostate | 1,554 | Colon & Rectum | 641 | Colon & Rectum | 684 |
| | Colon & Rectum | 1,325 | Bladder | 274 | Corpus Uteri | 208 |
| | Bladder | 400 | Non-Hodgkin's Lymphoma | 207 | Cervix Uteri | 183 |
| Plaquemines | All Cancers | 519 | All Cancers | 278 | All Cancers | 241 |
| | Lung | 101 | Lung | 66 | Breast | 75 |
| | Breast | 77 | Prostate | 64 | Lung | 35 |
| | Prostate | 64 | Colon & Rectum | 22 | Colon & Rectum | 28 |
| | Colon & Rectum | 50 | Oral Cavity & Pharynx | 17 | Bladder / Ovary | 9* |
| | Bladder | 25 | Bladder | 16 | Skin melanomas | 8 |
| St. Bernard | All Cancers | 1,667 | All Cancers | 861 | All Cancers | 806 |
| | Lung | 354 | Prostate | 201 | Breast | 218 |
| | Colon & Rectum | 228 | Lung | 187 | Lung | 153 |
| | Breast | 221 | Colon & Rectum | 123 | Colon & Rectum | 105 |
| | Prostate | 187 | Bladder | 51 | Non-Hodgkin's Lymphoma | 36 |
| | Bladder | 72 | Non-Hodgkin's Lymphoma | 34 | Corpus Uteri | 31 |
| Region 2 | All Cancers | 11,837 | All Cancers | 6,427 | All Cancers | 5,410 |
| | Prostate | 2,122 | Prostate | 2,122 | Breast | 1,785 |
| | Breast | 1,808 | Lung | 1,116 | Lung | 684 |
| | Lung | 1,800 | Colon & Rectum | 735 | Colon & Rectum | 666 |
| | Colon & Rectum | 1,401 | Bladder | 335 | Corpus Uteri | 227 |
| | Bladder | 443 | Kidney & Renal Pelvis | 222 | Non-Hodgkin's Lymphoma | 205 |
| Ascension | All Cancers | 1,207 | All Cancers | 654 | All Cancers | 553 |
| | Prostate | 233 | Prostate | 233 | Breast | 185 |
| | Lung | 201 | Lung | 120 | Lung | 81 |
| | Breast | 187 | Colon & Rectum | 68 | Colon & Rectum | 53 |
| | Colon & Rectum | 121 | Bladder | 30 | Ovary | 24 |
| | Bladder | 40 | Kidney & Renal Pelvis | 24 | Corpus Uteri / Cervix Uteri | 19* |
| East Baton Rouge | All Cancers | 8,079 | All Cancers | 4,288 | All Cancers | 3,791 |
| | Prostate | 1,478 | Prostate | 1,478 | Breast | 1,280 |
| | Breast | 1,296 | Lung | 701 | Lung | 472 |
| | Lung | 1,173 | Colon & Rectum | 486 | Colon & Rectum | 467 |
| | Colon & Rectum | 953 | Bladder | 231 | Corpus Uteri | 159 |
| | Bladder | 310 | Kidney & Renal Pelvis | 147 | Non-Hodgkin's Lymphoma | 154 |

## *Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999*

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| East Feliciana | All Cancers | 512 | All Cancers | 303 | All Cancers | 209 |
| | Lung | 89 | Prostate | 81 | Breast | 70 |
| | Prostate | 81 | Lung | 66 | Colon & Rectum | 30 |
| | Breast | 71 | Colon & Rectum | 38 | Lung | 23 |
| | Colon & Rectum | 68 | Bladder | 17 | Corpus Uteri | 11 |
| | Bladder | 20 | Oral Cavity & Pharynx | 13 | Non-Hodgkin's Lymphoma | 9 |
| Iberville | All Cancers | 758 | All Cancers | 438 | All Cancers | 320 |
| | Prostate | 132 | Prostate | 132 | Breast | 87 |
| | Lung | 128 | Lung | 85 | Colon & Rectum | 44 |
| | Colon & Rectum / Breast | 87* | Colon & Rectum | 43 | Lung | 43 |
| | Kidney & Renal Pelvis | 29 | Bladder | 25 | Cervix Uteri | 19 |
| | Bladder | 28 | Kidney & Renal Pelvis | 20 | Ovary | 14 |
| Pointe Coupee | All Cancers | 539 | All Cancers | 307 | All Cancers | 232 |
| | Colon & Rectum | 91 | Prostate | 78 | Breast | 60 |
| | Lung | 84 | Lung | 56 | Colon & Rectum | 44 |
| | Prostate | 78 | Colon & Rectum | 47 | Lung | 28 |
| | Breast | 61 | Bladder | 16 | Corpus Uteri | 12 |
| | Bladder | 22 | Non-Hodgkin's Lymphoma | 13 | Pancreas | 11 |
| West Baton Rouge | All Cancers | 498 | All Cancers | 274 | All Cancers | 224 |
| | Breast | 82 | Prostate | 78 | Breast | 81 |
| | Prostate | 78 | Lung | 46 | Lung | 25 |
| | Lung | 71 | Colon & Rectum | 36 | Colon & Rectum | 20 |
| | Colon & Rectum | 56 | Bladder | 14 | Ovary | 12 |
| | Bladder | 19 | Stomach | 12 | Corpus Uteri | 10 |
| West Feliciana | All Cancers | 244 | All Cancers | 163 | All Cancers | 81 |
| | Lung | 54 | Prostate / Lung | 42* | Breast | 22 |
| | Prostate | 42 | Colon & Rectum | 17 | Lung | 12 |
| | Colon & Rectum | 25 | Oral Cavity & Pharynx | 7 | Colon & Rectum | 8 |
| | Breast | 24 | Kidney &Renal Pelvis | 6 | Corpus Uteri / Cervix Uteri | ** |
| | Non-Hodgkin's Lymphoma / Oral Cavity & Pharynx | 8* | | | | |
| Region 3 | All Cancers | 6,906 | All Cancers | 3,755 | All Cancers | 3,151 |
| | Lung | 1,214 | Prostate | 912 | Breast | 989 |
| | Breast | 1,003 | Lung | 802 | Lung | 412 |
| | Prostate | 912 | Colon & Rectum | 490 | Colon & Rectum | 401 |
| | Colon & Rectum | 891 | Bladder | 231 | Corpus Uteri | 140 |
| | Bladder | 306 | Kidney & Renal Pelvis | 137 | Non-Hodgkin's Lymphoma | 134 |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Assumption | All Cancers | 417 | All Cancers | 237 | All Cancers | 180 |
| | Lung | 73 | Prostate | 58 | Breast | 65 |
| | Breast | 66 | Lung | 56 | Colon & Rectum | 18 |
| | Prostate | 58 | Colon & Rectum | 27 | Lung | 17 |
| | Colon & Rectum | 45 | Bladder | 17 | Cervix Uteri | 10 |
| | Bladder | 20 | Pancreas / Non-Hodgkin's Lymphoma | 8* | Non-Hodgkin's Lymphoma / Ovary / Skin Melanoma / Thyroid | ** |
| Lafourche | All Cancers | 1,579 | All Cancers | 840 | All Cancers | 739 |
| | Lung | 255 | Prostate | 204 | Breast | 225 |
| | Colon & Rectum | 232 | Lung | 161 | Colon & Rectum | 109 |
| | Breast | 230 | Colon & Rectum | 123 | Lung | 94 |
| | Prostate | 204 | Bladder | 49 | Non-Hodgkin's Lymphoma/ Corpus Uteri | 37* |
| | Bladder | 72 | Non-Hodgkin's Lymphoma | 28 | Kidney & Renal Pelvis | 29 |
| St. Charles | All Cancers | 820 | All Cancers | 446 | All Cancers | 374 |
| | Lung | 126 | Prostate | 125 | Breast | 121 |
| | Prostate | 125 | Lung | 74 | Lung | 52 |
| | Breast | 121 | Colon & Rectum | 58 | Colon & Rectum | 46 |
| | Colon & Rectum | 104 | Bladder | 31 | Ovary / Pancreas / Thyroid | 14* |
| | Bladder | 36 | Non-Hodgkin's Lymphoma | 14 | Corpus Uteri | 13 |
| St. James | All Cancers | 435 | All Cancers | 237 | All Cancers | 198 |
| | Breast | 71 | Prostate | 66 | Breast | 70 |
| | Prostate | 66 | Lung | 48 | Colon & Rectum | 23 |
| | Lung | 65 | Colon & Rectum | 27 | Lung | 17 |
| | Colon & Rectum | 50 | Bladder | 11 | Kidney & Renal Pelvis | 10 |
| | Kidney & Renal Pelvis | 20 | Kidney & Renal Pelvis / Pancreas | 10* | Corpus Uteri | 9 |
| St. John | All Cancers | 690 | All Cancers | 350 | All Cancers | 340 |
| | Lung | 123 | Prostate | 102 | Breast | 108 |
| | Breast | 110 | Lung | 71 | Lung | 52 |
| | Prostate | 102 | Colon & Rectum | 35 | Colon & Rectum | 36 |
| | Colon & Rectum | 71 | Bladder | 21 | Non-Hodgkin's Lymphoma | 17 |
| | Bladder | 31 | Kidney & Renal Pelvis | 18 | Cervix Uteri | 14 |
| St. Mary | All Cancers | 1,148 | All Cancers | 632 | All Cancers | 516 |
| | Lung | 216 | Prostate | 149 | Breast | 160 |
| | Breast | 162 | Lung | 143 | Lung | 73 |
| | Prostate | 149 | Colon & Rectum | 74 | Colon & Rectum | 63 |
| | Colon & Rectum | 137 | Bladder | 46 | Corpus Uteri / Ovary | 20* |
| | Bladder | 58 | Oral Cavity & Pharynx | 26 | Non-Hodgkin's Lymphoma /Pancreas | 16* |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Terrebonne | All Cancers | 1,817 | All Cancers | 1,013 | All Cancers | 804 |
| | Lung | 356 | Lung | 249 | Breast | 240 |
| | Colon & Rectum | 252 | Prostate | 208 | Lung | 107 |
| | Breast | 243 | Colon & Rectum | 146 | Colon & Rectum | 106 |
| | Prostate | 208 | Bladder | 56 | Corpus Uteri | 45 |
| | Non-Hodgkin's Lymphoma | 85 | Kidney & Renal Pelvis | 44 | Non-Hodgkin's Lymphoma | 41 |
| Region 4 | All Cancers | 11,604 | All Cancers | 6,210 | All Cancers | 5,394 |
| | Lung | 2,081 | Prostate | 1,615 | Breast | 1,599 |
| | Breast | 1,622 | Lung | 1,276 | Lung | 805 |
| | Prostate | 1,615 | Colon & Rectum | 752 | Colon & Rectum | 581 |
| | Colon & Rectum | 1,333 | Bladder | 298 | Corpus Uteri | 233 |
| | Non-Hodgkin's Lymphoma | 421 | Non-Hodgkin's Lymphoma | 215 | Non-Hodgkin's Lymphoma | 206 |
| Acadia | All Cancers | 1,454 | All Cancers | 777 | All Cancers | 677 |
| | Lung | 262 | Prostate | 206 | Breast | 194 |
| | Prostate | 206 | Lung | 144 | Lung | 118 |
| | Breast | 197 | Colon & Rectum | 113 | Colon & Rectum | 80 |
| | Colon & Rectum | 193 | Bladder | 31 | Corpus Uteri | 31 |
| | Non-Hodgkin's Lymphoma | 53 | Oral Cavity & Pharynx | 30 | Non-Hodgkin's Lymphoma | 26 |
| Evangeline | All Cancers | 753 | All Cancers | 384 | All Cancers | 369 |
| | Lung | 155 | Prostate | 92 | Breast | 86 |
| | Colon & Rectum | 98 | Lung | 90 | Lung | 65 |
| | Prostate | 92 | Colon & Rectum | 56 | Colon & Rectum | 42 |
| | Breast | 86 | Oral Cavity & Pharynx | 17 | Pancreas | 18 |
| | Non-Hodgkin's Lymphoma | 31 | Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma | 15 | Non-Hodgkin's Lymphoma / Corpus Uteri | 16* |
| Iberia | All Cancers | 1,613 | All Cancers | 854 | All Cancers | 759 |
| | Lung | 275 | Prostate | 233 | Breast | 228 |
| | Breast | 234 | Lung | 171 | Lung | 104 |
| | Prostate | 233 | Colon & Rectum | 109 | Colon & Rectum | 86 |
| | Colon & Rectum | 195 | Kidney & Renal Pelvis | 40 | Corpus Uteri | 41 |
| | Kidney & Renal Pelvis | 67 | Oral Cavity & Pharynx | 36 | Pancreas | 30 |
| Lafayette | All Cancers | 3,485 | All Cancers | 1,803 | All Cancers | 1,682 |
| | Lung | 583 | Prostate | 411 | Breast | 546 |
| | Breast | 549 | Lung | 357 | Lung | 226 |
| | Prostate | 411 | Colon & Rectum | 215 | Colon & Rectum | 160 |
| | Colon & Rectum | 375 | Bladder | 106 | Corpus Uteri | 69 |
| | Non-Hodgkin's Lymphoma | 137 | Non-Hodgkin's Lymphoma | 70 | Non-Hodgkin's Lymphoma | 67 |
| St. Landry | All Cancers | 2,068 | All Cancers | 1,125 | All Cancers | 943 |
| | Lung | 383 | Prostate | 312 | Breast | 278 |
| | Prostate | 312 | Lung | 241 | Lung | 142 |
| | Breast | 286 | Colon & Rectum | 119 | Colon & Rectum | 106 |
| | Colon & Rectum | 225 | Bladder | 64 | Pancreas | 44 |
| | Bladder / Pancreas | 85* | Pancreas | 41 | Non-Hodgkin's Lymphoma | 36 |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| St. Martin | All Cancers | 919 | All Cancers | 538 | All Cancers | 381 |
| | Lung | 200 | Prostate | 138 | Breast | 107 |
| | Prostate | 138 | Lung | 135 | Lung | 65 |
| | Colon & Rectum | 115 | Colon & Rectum | 69 | Colon & Rectum | 46 |
| | Breast | 107 | Bladder | 23 | Cervix Uteri | 19 |
| | Bladder | 31 | Pancreas | 21 | Corpus Uteri | 18 |
| Vermilion | All Cancers | 1,312 | All Cancers | 729 | All Cancers | 583 |
| | Lung / Prostate | 223* | Prostate | 223 | Breast | 160 |
| | Breast | 163 | Lung | 138 | Lung | 85 |
| | Colon & Rectum | 132 | Colon & Rectum | 71 | Colon & Rectum | 61 |
| | Non-Hodgkin's Lymphoma | 55 | Bladder | 31 | Non-Hodgkin's Lymphoma | 27 |
| | Bladder | 45 | Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma | 28* | Skin Melanomas | 25 |
| Region 5 | All Cancers | 61066 | All Cancers | 3,303 | All Cancers | 2,803 |
| | Lung | 1,059 | Prostate | 953 | Breast | 788 |
| | Prostate | 953 | Lung | 653 | Lung | 406 |
| | Breast | 792 | Colon & Rectum | 351 | Colon & Rectum | 370 |
| | Colon & Rectum | 721 | ladder | 209 | Corpus Uteri | 119 |
| | Bladder | 273 | Non-Hodgkin's Lymphoma | 133 | Non-Hodgkin's Lymphoma | 114 |
| Allen | All Cancers | 452 | All Cancers | 257 | All Cancers | 195 |
| | Lung | 94 | Lung / Prostate | 67* | Breast | 46 |
| | Prostate | 67 | Colon & Rectum | 27 | Colon & Rectum | 31 |
| | Colon & Rectum | 58 | Bladder | 13 | Lung | 27 |
| | Breast | 46 | Non-Hodgkin's Lymphoma | 11 | Cervix Uteri | 10 |
| | Bladder / Oral Cavity & Pharynx | 18* | Oral Cavity & Pharynx | 10 | Pancreas / Oral Cavity & Pharynx | 8* |
| Beauregard | All Cancers | 685 | All Cancers | 363 | All Cancers | 322 |
| | Prostate | 110 | Prostate | 110 | Breast | 81 |
| | Lung | 109 | Lung | 63 | Lung | 46 |
| | Breast | 82 | Colon & Rectum | 40 | Colon & Rectum | 38 |
| | Colon & Rectum | 78 | Bladder | 36 | Corpus Uteri | 17 |
| | Bladder | 46 | Non-Hodgkin's Lymphoma | 16 | Skin Melanomas | 15 |
| Calcasieu | All Cancers | 4,113 | All Cancers | 2,217 | All Cancers | 1,896 |
| | Lung | 686 | Prostate | 643 | Breast | 550 |
| | Prostate | 643 | Lung | 419 | Lung | 267 |
| | Breast | 553 | Colon & Rectum | 238 | Colon & Rectum | 265 |
| | Colon & Rectum | 503 | Bladder | 132 | Non-Hodgkin's Lymphoma | 84 |
| | Non-Hodgkin's Lymphoma | 174 | Non-Hodgkin's Lymphoma | 90 | Corpus Uteri | 74 |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Cameron | All Cancers | 174 | All Cancers | 93 | All Cancers | 81 |
| | Lung | 37 | Lung | 25 | Breast | 25 |
| | Breast | 25 | Prostate | 23 | Lung | 12 |
| | Prostate | 23 | Bladder | 7 | Colon & Rectum | 11 |
| | Colon & Rectum | 17 | Colon & Rectum | 6 | Ovary | 7 |
| | Bladder | 8 | Leukemias | ** | Cervix Uteri | ** |
| Jefferson Davis | All Cancers | 682 | All Cancers | 373 | All Cancers | 309 |
| | Lung | 133 | Prostate | 110 | Breast | 86 |
| | Prostate | 110 | Lung | 79 | Lung | 54 |
| | Breast | 86 | Colon & Rectum | 40 | Colon & Rectum | 25 |
| | Colon & Rectum | 65 | Bladder | 21 | Corpus Uteri | 20 |
| | Bladder | 29 | Non-Hodgkin's ymphoma | 14 | Pancreas | 14 |
| Region 6 | All Cancers | 6,265 | All Cancers | 3,372 | All Cancers | 2,893 |
| | Lung | 1,139 | Prostate | 873 | Breast | 817 |
| | Prostate | 873 | Lung | 719 | Lung | 420 |
| | Breast | 827 | Colon & Rectum | 418 | Colon & Rectum | 366 |
| | Colon & Rectum | 784 | Bladder | 185 | Non-Hodgkin's Lymphoma | 127 |
| | Bladder | 248 | Non-Hodgkin's Lymphoma | 118 | Corpus Uteri | 104 |
| Avoyelles | All Cancers | 870 | All Cancers | 488 | All Cancers | 382 |
| | Lung | 159 | Prostate / Lung | 103* | Breast | 105 |
| | Colon & Rectum | 123 | Colon & Rectum | 69 | Lung | 56 |
| | Breast | 105 | Bladder | 25 | Colon & Rectum | 54 |
| | Prostate | 103 | Kidney & Renal Pelvis | 23 | Non-Hodgkin's Lymphoma / Cervix Uteri | 17* |
| | Non-Hodgkin's Lymphoma | 35 | Pancreas | 21 | Corpus Uteri | 12 |
| Catahoula | All Cancers | 209 | All Cancers | 121 | All Cancers | 88 |
| | Lung | 42 | Prostate | 32 | Breast | 24 |
| | Prostate | 32 | Lung | 27 | Lung | 15 |
| | Breast | 24 | Colon & Rectum | 9 | Colon & Rectum | 12 |
| | Colon & Rectum | 21 | Bladder | 8 | Pancreas | ** |
| | Bladder / Pancreas | 11* | Non-Hodgkin's Lymphoma | 7 | | |
| Concordia | All Cancers | 355 | All Cancers | 181 | All Cancers | 174 |
| | Lung | 77 | Lung | 45 | Breast | 44 |
| | Colon & Rectum | 48 | Prostate | 43 | Lung | 32 |
| | Breast | 45 | Colon & Rectum | 28 | Colon & Rectum | 20 |
| | Prostate | 43 | Pancreas | 12 | Corpus Uteri / Cervix Uteri | 9* |
| | Pancreas | 20 | Leukemias | 7 | Pancreas / Kidney & Renal Pelvis | 8* |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Grant | All Cancers | 392 | All Cancers | 212 | All Cancers | 180 |
| | Lung | 79 | Prostate | 56 | Breast | 57 |
| | Breast | 58 | Lung | 50 | Lung | 29 |
| | Prostate | 56 | Colon & Rectum | 25 | Colon & Rectum | 25 |
| | Colon & Rectum | 50 | Bladder | 12 | Skin Melanomas | 8 |
| | Non-Hodgkin's Lymphoma | 16 | Non-Hodgkin's Lymphoma | 10 | Ovary / Pancreas / Corpus Uteri | 7* |
| Lasalle | All Cancers | 392 | All Cancers | 220 | All Cancers | 172 |
| | Prostate | 74 | Prostate | 74 | Breast | 49 |
| | Lung | 61 | Lung | 38 | Lung | 23 |
| | Breast | 49 | Colon & Rectum | 25 | Colon & Rectum | 22 |
| | Colon & Rectum | 47 | Bladder | 14 | Non-Hodgkin's Lymphoma | 8 |
| | Bladder | 17 | Oral Cavity & Pharynx | 7 | Cervix Uteri | 7 |
| Rapides | All Cancers | 2,826 | All Cancers | 1,523 | All Cancers | 1,303 |
| | Lung | 479 | Prostate | 412 | Breast | 399 |
| | Prostate | 412 | Lung | 303 | Lung | 176 |
| | Breast | 406 | Colon & Rectum | 204 | Colon & Rectum | 157 |
| | Colon & Rectum | 361 | Bladder | 79 | Non-Hodgkin's Lymphoma | 63 |
| | Non-Hodgkin's Lymphoma | 114 | Non-Hodgkin's Lymphoma | 51 | Cervix Uteri | 47 |
| Vernon | All Cancers | 785 | All Cancers | 394 | All Cancers | 391 |
| | Lung | 171 | Lung | 108 | Breast | 102 |
| | Breast | 102 | Prostate | 77 | Lung | 63 |
| | Colon & Rectum | 87 | Colon & Rectum | 40 | Colon & Rectum | 47 |
| | Prostate | 77 | Bladder | 28 | Ovary | 17 |
| | Bladder | 40 | Non-Hodgkin's Lymphoma | 20 | Non-Hodgkin's Lymphoma | 16 |
| Winn | All Cancers | 436 | All Cancers | 233 | All Cancers | 203 |
| | Prostate | 76 | Prostate | 76 | Breast | 37 |
| | Lung | 71 | Lung | 45 | Colon & Rectum | 29 |
| | Colon & Rectum | 47 | Colon & Rectum | 18 | Lung | 26 |
| | Breast | 38 | Bladder | 15 | Skin Melanomas | 13 |
| | Skin Melanomas | 20 | Leukemias | 10 | Non-Hodgkin's Lymphoma / Corpus Uteri | 10* |
| Region 7 | All Cancers | 1,203 | All Cancers | 6,452 | All Cancers | 5,552 |
| | Prostate | 2,006 | Prostate | 2,006 | Breast | 1,633 |
| | Lung | 1,957 | Lung | 1,243 | Colon & Rectum | 749 |
| | Breast | 1,653 | Colon & Rectum | 767 | Lung | 714 |
| | Colon & Rectum | 1,516 | Bladder | 317 | Corpus Uteri | 268 |
| | Bladder | 449 | Oral Cavity & Pharynx | 217 | Ovary | 204 |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Bienville | All Cancers | 473 | All Cancers | 265 | All Cancers | 208 |
| | Prostate | 96 | Prostate | 96 | Breast | 68 |
| | Lung | 72 | Lung | 53 | Colon & Rectum | 27 |
| | Breast | 68 | Colon & Rectum | 27 | Lung | 19 |
| | Colon & Rectum | 54 | Non-Hodgkin's Lymphoma | 12 | Cervix Uteri | 10 |
| | Non-Hodgkin's Lymphoma | 18 | Bladder | 8 | Corpus Uteri | 8 |
| Bossier | All Cancers | 1,899 | All Cancers | 1,018 | All Cancers | 881 |
| | Lung | 342 | Prostate | 293 | Breast | 248 |
| | Prostate | 293 | Lung | 205 | Lung | 137 |
| | Breast | 251 | Colon & Rectum | 126 | Colon & Rectum | 113 |
| | Colon & Rectum | 239 | Bladder | 54 | Ovary | 41 |
| | Bladder | 77 | Kidney & Renal Pelvis | 39 | Non-Hodgkin's Lymphoma | 343 |
| Caddo | All Cancers | 5,731 | All Cancers | 2,994 | All Cancers | 2,737 |
| | Prostate | 975 | Prostate | 975 | Breast | 820 |
| | Lung | 882 | Lung | 535 | Colon & Rectum | 363 |
| | Breast | 831 | Colon & Rectum | 361 | Lung | 347 |
| | Colon & Rectum | 724 | Bladder | 148 | Corpus Uteri | 143 |
| | Bladder | 219 | Oral Cavity & Pharynx | 119 | Ovary | 101 |
| Claiborne | All Cancers | 432 | All Cancers | 255 | All Cancers | 177 |
| | Prostate | 88 | Prostate | 88 | Breast | 57 |
| | Lung | 61 | Lung | 42 | Colon & Rectum | 27 |
| | Breast | 59 | Colon & Rectum | 26 | Lung | 19 |
| | Colon & Rectum | 53 | Bladder | 15 | Corpus Uteri | 12 |
| | Bladder | 16 | Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma / Leukemias | 8* | Non-Hodgkin's Lymphoma / Ovary | 6* |
| Desoto | All Cancers | 655 | All Cancers | 366 | All Cancers | 289 |
| | Prostate | 119 | Prostate | 119 | Breast | 84 |
| | Lung | 113 | Lung | 79 | Colon & Rectum | 38 |
| | Breast | 85 | Colon & Rectum | 35 | Lung | 34 |
| | Colon & Rectum | 73 | Bladder | 19 | Pancreas / Ovary | 13* |
| | Bladder | 27 | Oral Cavity & Pharynx | 14 | Corpus Uteri | 11 |
| Natchitoches | All Cancers | 763 | All Cancers | 386 | All Cancers | 377 |
| | Lung / Breast | 113* | Prostate | 101 | Breast | 112 |
| | Colon & Rectum | 110 | Lung | 71 | Colon & Rectum | 64 |
| | Prostate | 101 | Colon & Rectum | 46 | Lung | 42 |
| | Bladder | 30 | Bladder | 22 | Corpus Uteri | 20 |
| | Non-Hodgkin's Lymphoma | 26 | Oral Cavity & Pharynx | 17 | Ovary / Cervix Uteri | 13* |

## *Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999*

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Red River | All Cancers | 221 | All Cancers | 111 | All Cancers | 110 |
| | Colon & Rectum | 37 | Prostate | 30 | Breast | 26 |
| | Prostate | 30 | Colon & Rectum | 18 | Colon & Rectum | 19 |
| | Lung / Breast | 26* | Lung | 16 | Lung | 10 |
| | Skin Melanomas / Corpus Uteri | 7* | Skin Melanomas | ** | Corpus Uteri | 7 |
| | Non-Hodgkin's Lymphoma / Multiple Myeloma / Cervix Uteri | 6* | | | Cervix Uteri | 6 |
| Sabine | All Cancers | 589 | All Cancers | 352 | All Cancers | 237 |
| | Lung | 121 | Prostate / Lung | 88* | Breast | 64 |
| | Prostate | 88 | Colon & Rectum | 42 | Lung | 33 |
| | Colon & Rectum | 72 | Bladder | 21 | Colon & Rectum | 30 |
| | Breast | 64 | Oral Cavity & Pharynx | 13 | Non-Hodgkin's Lymphoma | 14 |
| | Bladder | 25 | Skin Melanomas | 12 | Pancreas | 10 |
| Webster | All Cancers | 1,241 | All Cancers | 705 | All Cancers | 536 |
| | Lung | 227 | Prostate | 216 | Breast | 154 |
| | Prostate | 216 | Lung | 154 | Lung | 73 |
| | Breast | 156 | Colon & Rectum | 86 | Colon & Rectum | 68 |
| | Colon & Rectum | 154 | Bladder | 29 | Corpus Uteri | 31 |
| | Non-Hodgkin's Lymphoma | 46 | Kidney & Renal Pelvis | 24 | Non-Hodgkin's Lymphoma | 24 |
| Region 8 | All Cancers | 8,309 | All Cancers | 4,432 | All Cancers | 3,877 |
| | Lung | 1,510 | Prostate | 1,239 | Breast | 1,115 |
| | Prostate | 1,239 | Lung | 994 | Lung | 516 |
| | Breast | 1,133 | Colon & Rectum | 446 | Colon & Rectum | 486 |
| | Colon & Rectum | 932 | Bladder | 196 | Corpus Uteri | 178 |
| | Non-Hodgkin's Lymphoma | 293 | Skin Melanomas | 165 | Non-Hodgkin's Lymphoma | 148 |
| Caldwell | All Cancers | 264 | All Cancers | 151 | All Cancers | 113 |
| | Lung | 58 | Lung | 41 | Breast | 27 |
| | Colon & Rectum | 38 | Prostate | 31 | Colon & Rectum | 22 |
| | Prostate | 31 | Colon & Rectum | 16 | Lung | 17 |
| | Breast | 28 | Oral Cavity & Pharynx | 10 | Non-Hodgkin's Lymphoma | 7 |
| | Non-Hodgkin's Lymphoma | 12 | Bladder | 6 | Pancreas | ** |
| East Carroll | All Cancers | 252 | All Cancers | 146 | All Cancers | 106 |
| | Lung | 48 | Prostate | 47 | Breast | 28 |
| | Prostate | 47 | Lung | 29 | Lung | 19 |
| | Colon & Rectum | 32 | Colon & Rectum | 22 | Colon & Rectum | 10 |
| | Breast | 28 | Oral Cavity & Pharynx | 8 | Cervix Uteri | 7 |
| | Oral Cavity & Pharynx | 10 | Bladder | 7 | Corpus Uteri | ** |

## Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Franklin | All Cancers | 549 | All Cancers | 297 | All Cancers | 252 |
| | Lung | 102 | Prostate | 90 | Breast | 60 |
| | Prostate | 90 | Lung | 64 | Lung | 38 |
| | Breast / Colon & Rectum | 60* | Colon & Rectum | 33 | Colon & Rectum | 27 |
| | Pancreas | 26 | Bladder | 13 | Pancreas | 16 |
| | Bladder | 17 | Pancreas | 10 | Corpus Uteri | 12 |
| Jackson | All Cancers | 444 | All Cancers | 247 | All Cancers | 197 |
| | Lung | 77 | Prostate | 71 | Breast | 55 |
| | Prostate | 71 | Lung | 48 | Lung | 29 |
| | Breast | 56 | Bladder | 21 | Colon & Rectum | 24 |
| | Colon & Rectum | 43 | Colon & Rectum | 19 | Cervix Uteri | 10 |
| | Bladder | 24 | Skin Melanomas | 12 | Corpus Uteri / Pancreas | 9* |
| Lincoln | All Cancers | 892 | All Cancers | 480 | All Cancers | 412 |
| | Lung | 143 | Prostate | 134 | Breast | 136 |
| | Breast | 137 | Lung | 101 | Colon & Rectum | 46 |
| | Prostate | 134 | Colon & Rectum | 41 | Lung | 42 |
| | Colon & Rectum | 87 | Skin Melanomas | 29 | Corpus Uteri | 29 |
| | Skin Melanomas | 47 | Bladder | 25 | Skin Melanomas | 18 |
| Madison | All Cancers | 197 | All Cancers | 102 | All Cancers | 95 |
| | Lung | 39 | Prostate / Lung | 23* | Breast | 23 |
| | Prostate / Breast | 23* | Colon & Rectum / Esophagus | 9* | Lung | 16 |
| | Colon & Rectum | 22 | Stomach | 8 | Colon & Rectum | 13 |
| | Esophagus | 12 | Non-Hodgkin's Lymphoma / Leukemias | ** | Pancreas / Cervix Uteri | ** |
| | Stomach | 9 | | | Multiple Myeloma | ** |
| Morehouse | All Cancers | 819 | All Cancers | 440 | All Cancers | 379 |
| | Lung | 139 | Prostate | 138 | Breast | 119 |
| | Prostate | 138 | Lung | 94 | Colon & Rectum | 54 |
| | Breast | 123 | Colon & Rectum | 39 | Lung | 45 |
| | Colon & Rectum | 93 | Non-Hodgkin's Lymphoma | 17 | Corpus Uteri / Pancreas | 13* |
| | Non-Hodgkin's Lymphoma | 29 | Bladder | 16 | Non-Hodgkin's Lymphoma | 12 |
| Ouachita | All Cancers | 3,187 | All Cancers | 1,636 | All Cancers | 1,551 |
| | Lung | 575 | Prostate | 451 | Breast | 454 |
| | Breast | 461 | Lung | 363 | Lung | 212 |
| | Prostate | 451 | Colon & Rectum | 172 | Colon & Rectum | 186 |
| | Colon & Rectum | 358 | Bladder | 69 | Corpus Uteri | 76 |
| | Non-Hodgkin's Lymphoma | 116 | Skin Melanomas | 66 | Non-Hodgkin's Lymphoma | 59 |

## *Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999*

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| Richland | All Cancers | 579 | All Cancers | 319 | All Cancers | 260 |
| | Lung | 111 | Prostate / Lung | 77* | Breast | 71 |
| | Prostate | 111 | Colon & Rectum | 26 | Lung / Colon & Rectum | 34* |
| | Breast | 77 | Bladder | 19 | Corpus Uteri | 13 |
| | Colon & Rectum | 73 | Leukemias | 16 | Ovary | 11 |
| | Bladder / Leukemias | 22* | Non-Hodgkin's Lymphoma | 13 | Multiple Myeloma | 9 |
| Tensas | All Cancers | 138 | All Cancers | 78 | All Cancers | 60 |
| | Prostate | 30 | Prostate | 30 | Breast | 16 |
| | Lung | 29 | Lung | 20 | Colon & Rectum | 13 |
| | Colon & Rectum | 21 | Colon & Rectum | 8 | Lung | 9 |
| | Breast | 16 | Leukemias | ** | Bladder / Non-Hodgkin's Lymphoma | ** |
| | Leukemias | ** | | | | |
| Union | All Cancers | 625 | All Cancers | 335 | All Cancers | 290 |
| | Lung | 124 | Prostate | 88 | Breast | 85 |
| | Prostate | 88 | Lung | 85 | Colon & Rectum | 40 |
| | Breast | 87 | Colon & Rectum | 41 | Lung | 39 |
| | Colon & Rectum | 81 | Oral Cavity & Pharynx | 24 | Non-Hodgkin's Lymphoma | 15 |
| | Oral Cavity & Pharynx | 26 | Skin Melanomas | 12 | Ovary | 13 |
| West Carroll | All Cancers | 363 | All Cancers | 201 | All Cancers | 162 |
| | Lung | 65 | Prostate | 59 | Breast | 41 |
| | Prostate | 59 | Lung | 49 | Colon & Rectum | 17 |
| | Breast | 41 | Colon & Rectum | 20 | Lung | 16 |
| | Colon & Rectum | 37 | Oral Cavity & Pharynx | 10 | Non-Hodgkin's Lymphoma | 10 |
| | Non-Hodgkin's Lymphoma | 16 | Bladder | 8 | Skin Melanomas | 9 |
| Region 9 | All Cancers | 8,463 | All Cancers | 4,566 | All Cancers | 3,897 |
| | Lung | 1,497 | Prostate | 1,302 | Breast | 1,216 |
| | Prostate | 1,302 | Lung | 937 | Lung | 560 |
| | Breast | 1,227 | Colon & Rectum | 507 | Colon & Rectum | 457 |
| | Colon & Rectum | 964 | Bladder | 246 | Non-Hodgkin's Lymphoma | 170 |
| | Bladder | 332 | Kidney & Renal Pelvis | 169 | Corpus Uteri | 154 |
| Livingston | All Cancers | 1,532 | All Cancers | 835 | All Cancers | 697 |
| | Lung | 301 | Prostate | 238 | Breast | 199 |
| | Prostate | 238 | Lung | 181 | Lung | 120 |
| | Breast | 200 | Colon & Rectum | 80 | Colon & Rectum | 88 |
| | Colon & Rectum | 168 | Bladder | 54 | Non-Hodgkin's Lymphoma | 29 |
| | Bladder | 70 | Oral Cavity & Pharynx | 38 | Corpus Uteri | 25 |

## *Top Five Cancers and Number Of Cases Diagnosed In Louisiana By Region And Parish, 1995-1999*

| Region / Parish | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| St. Helena | All Cancers | 128 | All Cancers | 76 | All Cancers | 52 |
| | Prostate | 30 | Prostate | 30 | Breast | 15 |
| | Lung | 19 | Lung | 13 | Lung / Colon & Rectum | 6* |
| | Breast | 15 | Colon & Rectum | 7 | Thyroid | ** |
| | Colon & Rectum | 13 | Larynx | ** | | |
| | Larynx | 6 | | | | |
| St. Tammany | All Cancers | 3,653 | All Cancers | 1,947 | All Cancers | 1,706 |
| | Lung / Breast | 576 | Prostate | 552 | Breast | 572 |
| | Prostate | 552 | Lung | 338 | Lung | 238 |
| | Colon & Rectum | 404 | Colon & Rectum | 221 | Colon & Rectum | 183 |
| | Non-Hodgkin's Lymphoma | 165 | Bladder | 114 | Non-Hodgkin's Lymphoma | 84 |
| | Bladder | 158 | Kidney & Renal Pelvis | 85 | Corpus Uteri | 69 |
| Tangipahoa | All Cancers | 1,969 | All Cancers | 1,079 | All Cancers | 890 |
| | Lung | 377 | Prostate | 288 | Breast | 278 |
| | Prostate | 288 | Lung | 254 | Lung | 123 |
| | Breast | 280 | Colon & Rectum | 135 | Colon & Rectum | 107 |
| | Colon & Rectum | 242 | Bladder | 48 | Ovary | 35 |
| | Non-Hodgkin's Lymphoma | 64 | Oral Cavity & Pharynx | 37 | Non-Hodgkin's Lymphoma | 34 |
| Washington | All Cancers | 1,181 | All Cancers | 629 | All Cancers | 552 |
| | Lung | 224 | Prostate | 194 | Breast | 152 |
| | Prostate | 194 | Lung | 151 | Colon & Rectum / Lung | 73* |
| | Breast | 156 | Colon & Rectum | 64 | Corpus Uteri | 26 |
| | Colon & Rectum | 137 | Bladder | 29 | Non-Hodgkin's Lymphoma | 21 |
| | Non-Hodgkin's Lymphoma | 43 | Non-Hodgkin's Lymphoma | 22 | Pancreas | 20 |

* Number of cases is the same at each site.
** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Source: Louisiana Tumor Registry

# F. Chronic Disease—Behavioral Risk Factor Surveillance System (BRFSS)

To collect information needed by its primary and secondary prevention programs, the Louisiana Office of Public Health Chronic Disease Control Program, in cooperation with the Centers for Disease Control and Prevention (CDC), began to participate in the Behavioral Risk Factor Surveillance System (BRFSS) in 1991. The purpose of the BRFSS is to provide state-level prevalence data on health-related behaviors and attitudes. Information collected in the survey is used in the state's ongoing effort to plan, develop, and evaluate health promotion and disease prevention programs. Data from the BRFSS are also used to monitor progress toward achieving the national objectives of the Healthy People 2000 program of the United States Department of Health and Human Services (USDHHS, 1990).
Adults ages 18 years and older with the exclusion of those residing in institutions such as geriatric centers, hospitals, jail, or prison may be included in the BRFSS. Some survey questions are asked each year and some are asked on alternating years. The following information, representing non-institutionalized Louisiana adult residents ages 18 and older, are from the most recent BRFSS that collected the specified data.

## BRFSS: Tobacco Use

### *Cigarette Smoking*

Tobacco use, particularly cigarette smoking, is the leading preventable cause of death in Louisiana, but the health consequences extend beyond smokers to non-smokers involuntarily exposed to environmental tobacco smoke or second-hand smoke. Each hour a Louisiana resident from tobacco related causes. Approximately 358,000 Louisiana children under the age of 18 years are exposed to Environmental Tobacco Smoke (ETS) inside their homes. Over 1 million days of work are lost each year in the state due to tobacco use. Louisiana spends approximately $1.46 billion each year in medical costs to cover tobacco related illnesses.

***Adults:***

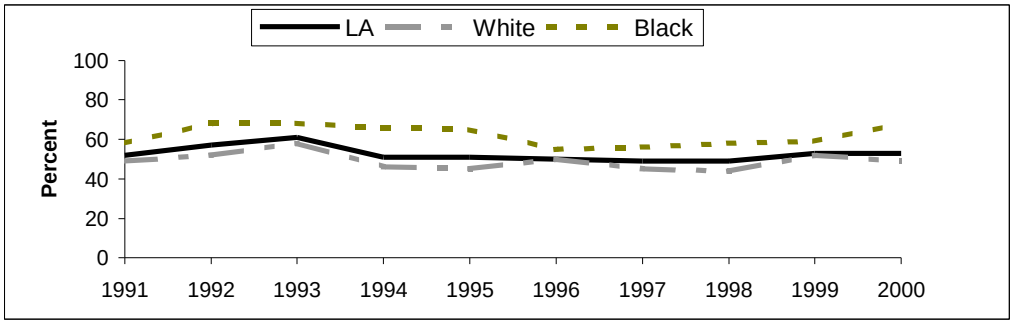
*i.* ***Current Smokers****:* In 2000, according to BRFSS results, approximately one in four adults (24.1%) in Louisiana is a current smoker and at increased risk of developing smoking related illnesses, which include heart disease, lung cancer, cancer of the pancreas, kidney, and cervix.

| Demographic Profile of Current Smokers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Age* | *% Who Currently Smoke* | *Sex* | *% Who Currently Smoke* | *Race* | *% Who Currently Smoke* | *Income* | *% Who Currently Smoke* | *Education* | *% Who Currently Smoke* |
| *18-24* | 29.6 | *Male* | 26.8 | White | 26.2 | *Less than $15,000* | 27.3 | *Less than H.S.* | 29.3 |
| *25-44* | 29.3 | *Female* | 21.7 | Black | 19.5 | *$15,000-$24,999* | 27.5 | *H.S. or G.E.D.* | 27.2 |
| *45-64* | 23.5 | | | Hispanic | 22.4 | *$25,000-$49,999* | 27.2 | *Some post-H.S.* | 24.6 |
| *65+* | 8.0 | | | | | *$50,000+* | 19.9 | *College Graduate* | 14.3 |

Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

***ii. Cessation****:* Among current smokers, according to 2000 BRFSS results, 53% attempted to quit smoking for one or more days during the twelve months preceding the survey. Males (56%) were more likely to attempt to quit smoking compared to females (48%). Other groups more likely to attempt to quit smoking included the 18-24 year age group (68%), blacks (68%) and individuals with less than high school level of education (59%).

**10-Year Trend of Adult Smokers who tried to Quit Smoking at least on one day in the past year**

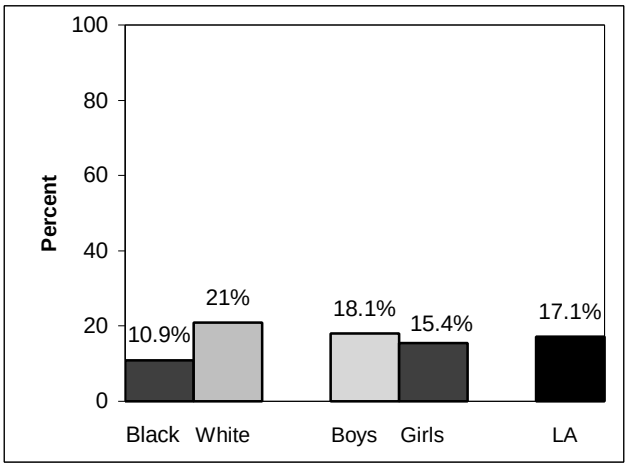



Louisiana Office of Public Health, Tobacco Control Program, BRFSS 2000

***Youth:***

**i. *Current Smokers*:** Approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking[1]. According to the 2000 Youth Tobacco Survey (LYTS), one in three (33%) middle school students has already smoked a whole cigarette before the age of 14 years, with a higher prevalence among white males. Lifetime prevalence of cigarette use for Louisiana students ranges from 12% in the 6th grade to a high of 23% in the 8th grade. Seventeen percent of Louisiana students reported smoking cigarettes at least one day in the past 30 days.

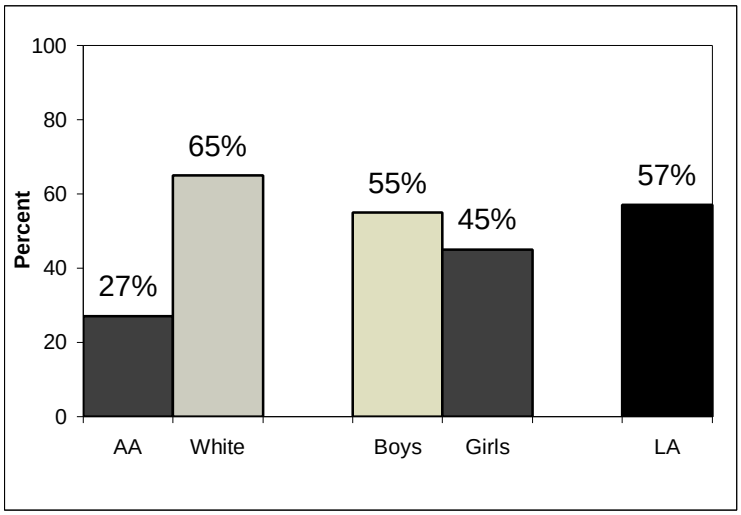
**Current smokers (6th – 8th Grade)**




Louisiana Office of Public Health, Tobacco Control Program, YTS 2000

***ii.*** ***Cessation:*** According to 2000 Youth Tobacco Survey data, approximately 48% of the 6th – 8th graders who currently smoke have tried to quit at least once in the past 12 months. White teenagers (65%) who currently smoke were more likely to try quitting compared to Blacks (27%), and higher rates were observed for males (55%) compared to females (45%). Teenagers in the 8th grade (44%) were more likely to try quitting compared to 6th graders (23%).

**Figure: Current smokers (6th – 8th Grade) who ever tried to quit smoking**




Louisiana Office of Public Health, Tobacco Control Program, YTS 2000

***Pregnant Women***

Evidence shows that maternal tobacco use is associated with mental retardation, low birth weight and birth defects such as oral clefts. In Louisiana, according to the 1999 Louisiana Pregnancy Risk Assessment and Monitoring System (LaPRAMS), 12% of the women reported smoking during the last

trimester of their pregnancy, with smoking rates higher among white women (17.9%), women less than 20 years of age (14.5%), and in women with less than high school level of education (19.9%).

***Smokeless Tobacco***

The link between occurrence of oral cancer and the use of smokeless tobacco, snuff, and chewing tobacco has been clearly documented; available research shows that snuff use increases the risk of oral cancer among non-smokers four-fold. Among chronic snuff users the excess risk of cancer of the gum and buccal mucosa reaches nearly fifty-fold. In the United States, more than 30,000 cases a year of oral cancer are attributed to the use of smokeless tobacco.

According to 2000 BRFSS results, 16% of adult Louisianians have used smokeless tobacco. Use of smokeless tobacco was higher in males (30%) compared to females (3%). Four percent of adults in Louisiana currently use smokeless tobacco and are therefore at risk for illnesses related to smokeless tobacco use.

***Demographic Profile of Current Smokeless Tobacco Users***

| Gender | % Who Currently Use Smokeless Tobacco | Age | % Who Currently Use Smokeless Tobacco | Education | % Who Currently Use Smokeless Tobacco |
|---|---|---|---|---|---|
| *Male* | 6.7 | *18-24* | 5.7 | *Less than H.S.* | 4.5 |
| *Female* | 0.6 | *25-44* | 3.2 | *H.S. or G. E.D.* | 2.9 |
| | | *45-64* | 3.2 | *Some post H.S.* | 3.9 |
| | | *65+* | 2.5 | *College graduate* | 3.2 |

Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

***Secondhand Smoke***

Environmental Tobacco Smoke (ETS) or Secondhand Smoke causes more than 53,000 deaths annually in the United States. Secondhand smoke is a proven cause of respiratory problems in nonsmokers. Second-hand smoke causes 30 times as many lung cancer deaths as all regulated air pollutants combined.

For the year 2000, data from the BRFSS, estimates that approximately 356,000 Louisiana children under the age of 18 years were exposed to ETS inside their homes. Approximately one in three adults (30.4 %) in Louisiana reported living in a household in which at least one child under the age of 5 years was exposed to ETS inside the house as compared to a median of 15% for the US. This translates into 91,000 children under 5 years of age living in 180,000 households in Louisiana who were exposed to ETS.

Research has shown that infants who are exposed to maternal tobacco smoke while *in utero* and later on to ETS during infancy develop wheezing and have an impairment of lung functioning. According to 1999 LaPRAMS data, 11% of the newborns were exposed to tobacco smoke, and of the infants who were

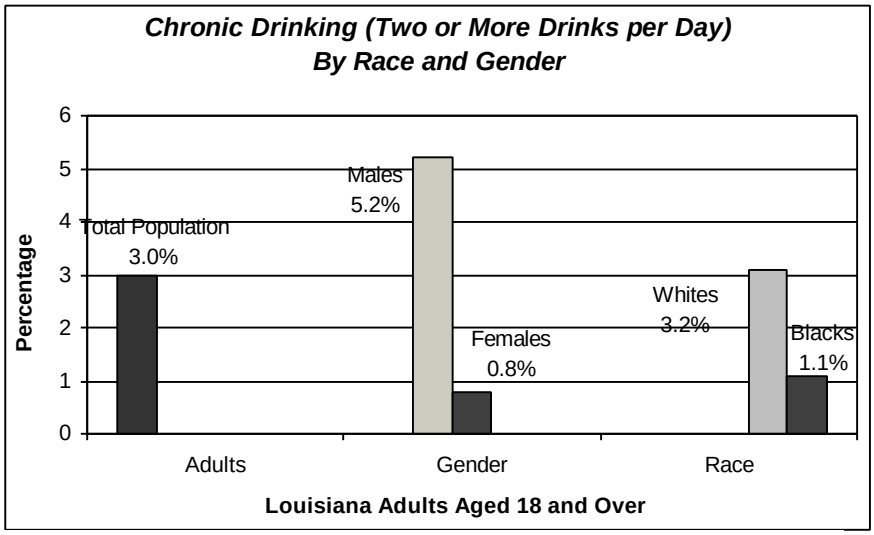
exposed, the average time of exposure was 5.5 hours per day. Results from the same survey show that one in five mothers (19%) of newborns reported that they smoked cigarettes during the 3-6 months after delivery. Higher rates were observed for white women, women with less than high school level of education, women on Medicaid, unmarried women and also in women under the age of 20 years.

***Smoking and Economic Costs***

Louisiana ranks 44th in the US (No. 1 is the lowest death rate) for average annual deaths related to smoking. Tobacco use places a significant economic and health burden on the people of Louisiana. Total direct and indirect costs for 1994 in Louisiana attributable to cigarette smoking were estimated at $1.46 billion. Persons on Medicaid and those with no health insurance have higher rates of current smoking than persons with private insurance. Since almost half of Louisiana residents are on Medicaid or have no health insurance, it is likely that the state bears close to half of all direct medical care costs due to tobacco through Medicaid or indigent care (SAMMEC 1994).

***BRFSS: Alcohol Use***

Health and social problems associated with heavy, chronic, and binge drinking are well recognized. Liver diseases are associated with chronic alcohol abuse, and fatal motor vehicle accidents are associated with




Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 2000 BRFSS

heavy chronic and binge drinking. Chronic drinking is defined as two or more drinks daily for thirty days or at least sixty drinks per month. Binge drinking is defined as five or more drinks on one or more occasions within thirty days.

Based on the 2000 BRFSS, approximately 14.0% of the Louisiana adult population reported at least one episode of binge drinking in the thirty days prior to the survey. Men (22.2%) were over three times more likely to engage in binge drinking than women (6.3%). Whites (16.1%) were more likely to report binge drinking than blacks (6.0%). The prevalence of binge drinking decreased with increasing age.

Approximately 3.0% of adult Louisianans reported that they consumed at least two alcoholic drinks each day of the month prior to the survey. Males (5.2%) were more likely than females (0.8%) to report chronic alcohol use. Whites (3.2%) were more likely than blacks (1.1%) to report chronic alcohol use.

***Drinking and Driving***

Many studies suggest that automobile crashes in which alcohol plays a role tend to be much more severe than other crashes. Nationally, alcohol plays a role in about 20% of crashes involving serious injury to drivers or passengers, about 50% of all fatal crashes, and about 60% of single-vehicle fatal crashes. Estimates place the number of deaths in the United States attributed to alcohol-related motor vehicle crashes at over 22,000. Three percent of adults in Louisiana reported that on at least one occasion, they had driven when they had had too much to drink.

***BRFSS: Nutrition and Exercise***

Nutrition and exercise are important to good health overall and are related to weight or body fatness. Increases in body fatness are associated with high blood pressure, diabetes, coronary heart disease, and atherosclerosis. Additionally, high fat, low fiber diets are associated with various types of cancer.

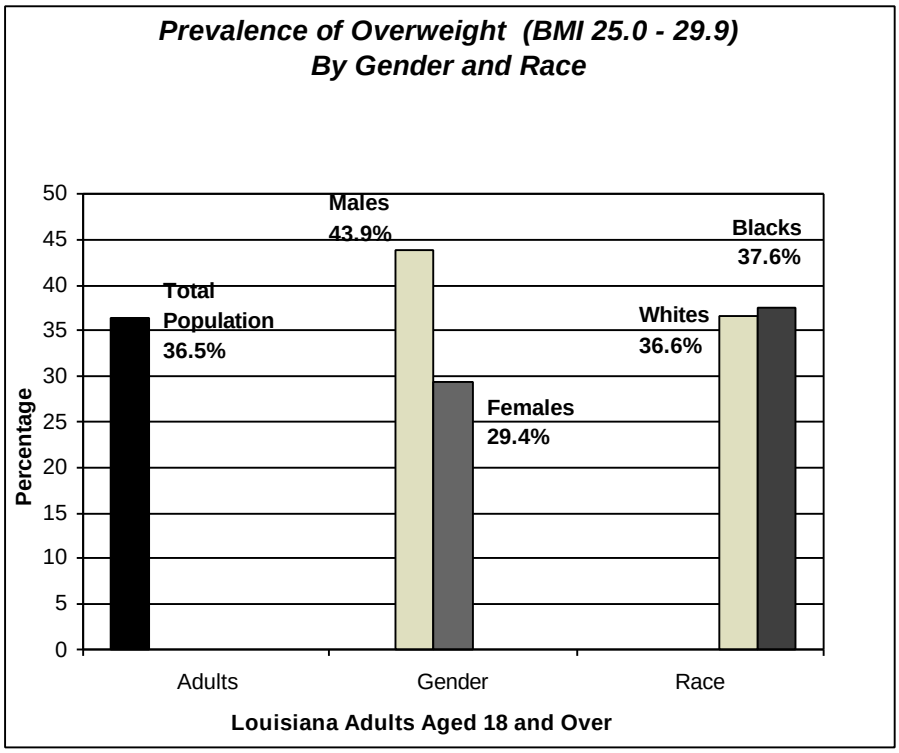
***Overweight/Obesity***

Metabolism, food intake, and activity levels are the three main factors that affect how much we weigh. While some individuals may have underlying physical disorders that cause them to gain or lose too much weight, most people can control their weight by matching their food intake to their activity level. Even though the amount of fat that we carry on our bodies is, for the most part, totally within our control, the percentage of Louisianans who are overweight or obese has been steadily and dramatically on the rise. Adult obesity rose from 16% in 1991 to 23.6% in 2000, with the largest jump seen in the 18-29 year old age group. Children and teens are also getting heavier. Overweight children and teens are more likely to be overweight as adults, substantially raising their risk of hypertension, high cholesterol, type II diabetes (adult onset), heart disease, stroke, gallbladder disease, osteoarthritis, and various cancers.[4]

The body mass index (BMI) is an index of weight relative to height, and it is used to estimate the amount of fat a person has on his/her body. Prior to 1995, the World Health Organization (WHO) defined overweight as a BMI equal to or greater than 27.8 for males, and a BMI equal to or greater than 27.3 for females. However, as evidence mounted that indicated an increased risk of morbidity and mortality for individuals with a BMI of 25.0 or greater, WHO responded by redefining overweight and obesity. The new definition of overweight is an adult with a BMI between 25.0-

> The new definition of overweight is an adult with a bmi between 25.0-29.9 $kg/m^2$ and obesity is defined as an adult with a bmi of 30 $kg/m^2$ or greater. **Because of this change, readers may find earlier obesity/overweight figures that do not agree with those found in this report.**

29.9 kg/m$^2$ and obesity is defined as an adult with a bmi of 30 kg/m$^2$ or greater. Because of this change, readers may find earlier obesity/overweight figures that do not agree with those found in this report.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

More than one in three (36.5%) of Louisiana adults is overweight. Males (43.9%) were more likely than females (29.4%) to be overweight. Whites (36.6%) and blacks (37.6%) had similar overweight rates. While Louisiana's proportion of overweight adults is comparable to the proportion nationally, over the past decade Louisiana's obesity rate has been higher than the national average. In 2000, 23.6% of adults in Louisiana were obese, compared to only 20.6% nationwide. Females (24.7%) were more likely to be obese than males (22.4%). Blacks (31.6%) were more likely to be obese than whites (20.4%). Those with lower incomes report higher obesity rates as well as those with lower educational status.

***Fruit and Vegetable Consumption***

The National Academy of Sciences, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, the American Cancer Society and the National Cancer Institute specify in their dietary guidelines for fiber intake that at least five servings of fruits and vegetables per day are consistent with the maintenance of good health and cancer prevention.

According to the 2000 BRFSS results, 84% of adults in Louisiana reported not eating at least five servings of fruits and vegetables per day.

### *Physical Activity*

The Surgeon General's report, *Physical Activity and Health*[4], concluded that individuals of all ages who engage in regular physical activity have a lower mortality rate than individuals with sedentary lifestyles. While higher levels of fitness have greater health benefits, studies suggest that even moderate amounts of activity are beneficial. Regular physical activity is defined as thirty minutes of physical activity five times per week regardless of intensity. An increase in physical activity is associated with decreases in body fatness, lowering of blood pressure, and increased glucose tolerance.

According to the BRFSS, in the year 2000, 85% of adult Louisianians reported not being involved in regular physical activity (U.S. Median, 78.2%). As seen in the table, females, blacks, individuals who are 25 years and older, individuals with an annual household income less than $15,000 and individuals with less than high school level of education are less likley to engage in the recommended level of physical activity.

***Demographic Profile of Louisiana Adults 18 Years and Older Who Do Not Receive The Recommended Level of Physical Activity***

| *Age* | *Percent* | *Sex* | *Percent* | *Race* | *Percent* | *Income* | *Percent* | *Education* | *Percent* |
|---|---|---|---|---|---|---|---|---|---|
| *18-24* | 81.7 | *Male* | 84.0 | *White* | 84.7 | *Less than $15,000* | 87.4 | *Less than H.S.* | 89.9 |
| *25-44* | 86.5 | *Female* | 86.6 | *Black* | 87.6 | *$15,000-$24,999* | 86.5 | *H.S. or G.E.D.* | 87.7 |
| *45-64* | 85.7 | | | *Hispanic* | 79.7 | *$25,000-$49,999* | 86.0 | *Some post-H.S.* | 84.0 |
| *65+* | 85.1 | | | | | *$50,000+* | 80.7 | *College Graduate* | 79.3 |

Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

### *BRFSS: Health Status*

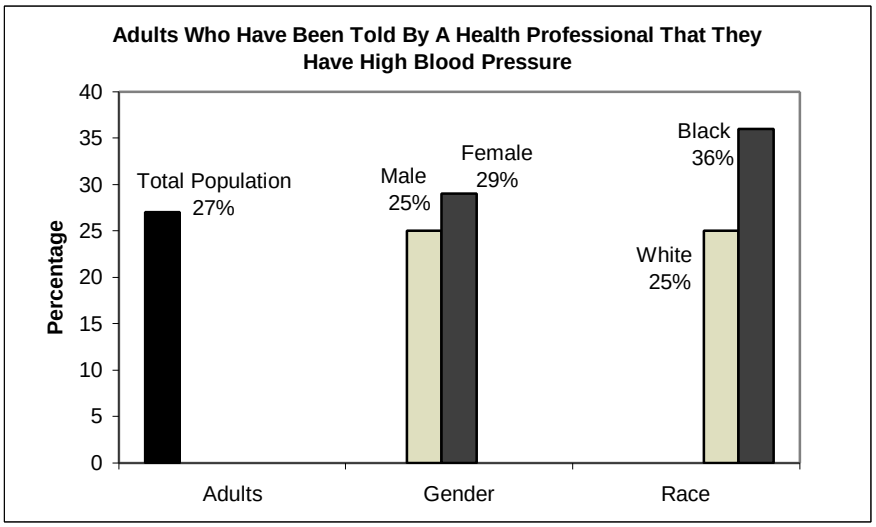
Overall, the health status of the adult population may be reflected in the chronic disease burden. Chronic diseases of public health importance (i.e. diseases that are among the leading causes of death, that have high economic and disability impact, etc.) include hypertension, high cholesterol, and diabetes. The goal of public health with regard to these diseases is early detection through periodic screening and treatment.

[4] U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta, GA. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

### `High Blood Pressure (Hypertension)

High blood pressure is associated with increased risk for stroke, kidney failure, and coronary heart disease. Blood pressure tends to increase with age and can be affected by weight gain, physical inactivity, and, to a lesser extent, diet. Blood pressure should be monitored periodically; individuals with increased levels of blood pressure (greater than 140/90 mm Hg) recorded more than once should be referred for treatment.

More than one out of every four Louisianians (27%) has been told by a health professional that they have high blood pressure. Blacks are disproportionately affected by high blood pressure with a significantly higher percentage of blacks (36%) compared to whites (25%) reporting being ever told that their blood pressure was high. Also a greater proportion of females (29%) compared to males (25%) reported being told by a health professional that their blood pressure was high.

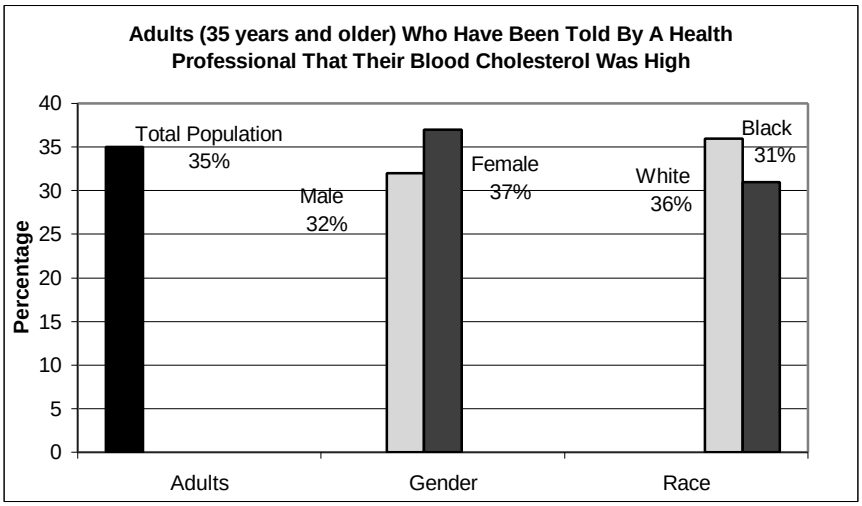



Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

### High Cholesterol

High blood cholesterol is one of the major modifiable risk factors for coronary heart disease. It has been estimated that each 1% reduction in blood cholesterol levels results in a 2% reduction in the risk for heart disease.

More than one in three (35%) Louisiana adults (35 years and older) reported being told by a health professional that their blood cholesterol was high. A greater percentage of females (37%) compared to males (32%) and whites (36%) compared to blacks (31%) reported being told by a health professional that their blood cholesterol was high.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

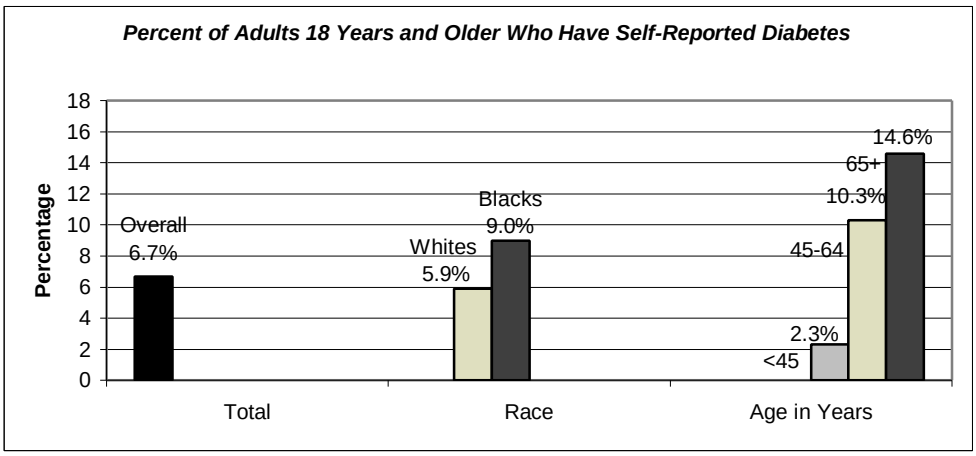
***Diabetes***

Diabetes is a complex, serious, and increasingly common disease. It is characterized by inappropriate high glucose level in the blood, resulting from inadequate insulin production, inability of the body to use insulin, or both. Insulin is a hormone secreted by the pancreas that allows glucose to enter body cells and to be converted to energy, protein, and fat. Persons who are obese, physically inactive, or members of ethnic minorities (Blacks, Hispanic/Latino Americans, and American Indians) and those with a family history of diabetes or prior gestational diabetes, are at a higher risk of acquiring diabetes.

Diabetes is a common and serious disease in Louisiana. It is a costly disease not only in terms of the economic burden it imposes on the state, but also in terms of the human suffering inflicted by the disease and its complications. Diabetes is the most common cause of non-traumatic amputations and end-stage renal disease and the leading cause of blindness in adults aged 20 to 74. Diabetes accounts for approximately 40% of new cases of end-stage renal disease nationwide. In 1997, total direct and indirect costs due to diabetes were estimated at $98 billion.

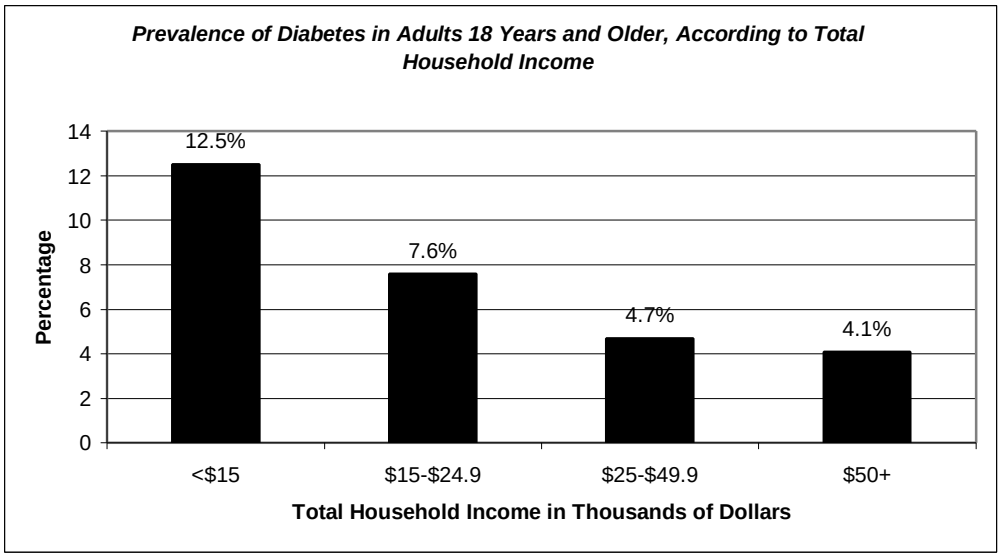
Diabetes affects about 16 million Americans or 6% of the population of the United States. As of 1996, Louisiana had the highest death rate due to diabetes (32.5 per 100,000). This compared to a national rate of 18.5 per 100,000. In 2001, an in-depth analysis of diabetes in Louisiana was performed using the most current information. Data were compiled from the Louisiana BRFSS 2000.

An estimated 208,500 or 6.7% of Louisiana residents 18 years and older have diabetes. Blacks (9.0%) have a higher prevalence than whites (5.9%). Age disparities are evident, with the oldest group (65+ years) having the highest prevalence (14.6%), compared to middle-aged (45-64 years old) Louisianans (10.3%) and the youngest group (<45 years), for whom the prevalence is 2.3%.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

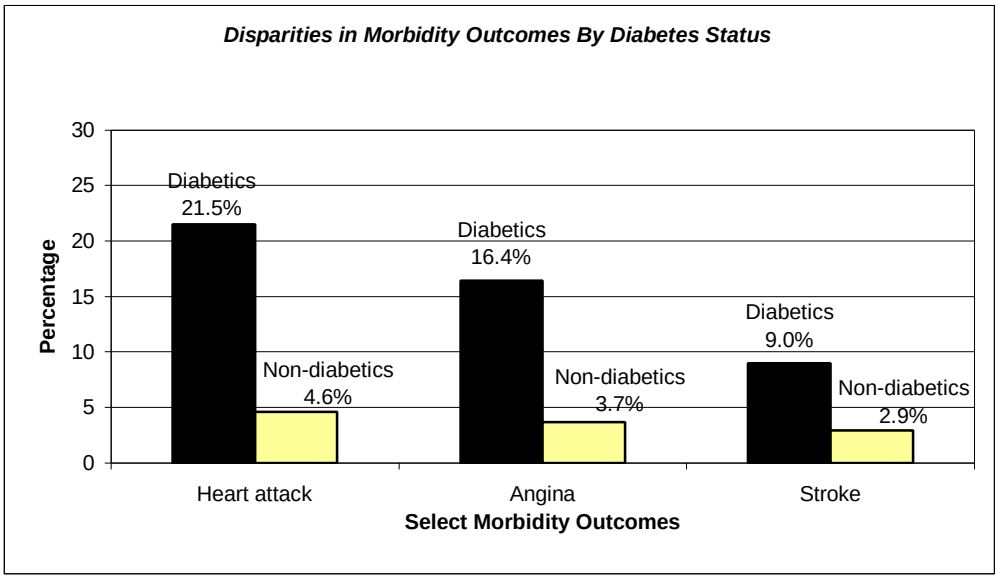
Diabetes disproportionately affects Louisianians from households with low total income. The highest diabetes prevalence is found among individuals with a household income less than $15,000 (12.5%); for individuals with incomes of $15,000 - $24,999, the prevalence is 7.6%. Those with household incomes $25,000 - $49,999 and $50,000+ had similar, lower prevalence, at 4.7% and 4.1%, respectively. It must be noted that the disparities in race reflect, to some extent, income disparities, as higher proportions of blacks (25.3%) report total household incomes less than $15,000 compared to whites (10.9%).




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

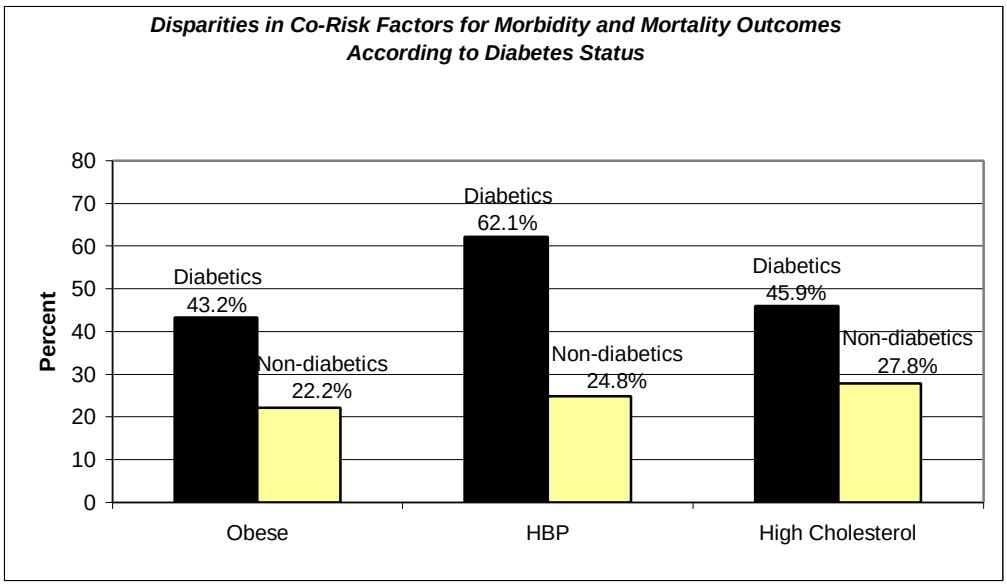
Those with diabetes face an excess risk for several morbidity outcomes, as well as excess risk for mortality. As a case in point, 21.5% of persons with diabetes have had a heart attack, compared to 4.6% of non-diabetics, and 16.4% of diabetics reported that they had angina, compared to 3.7% of non-diabetics (BRFSS, 2000). The risk of diabetics for stroke is also higher than it is for non-diabetics. In

2000, 9% of Louisiana diabetics reported having had a stroke, compared with a prevalence of 2.9% among non-diabetics.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

The higher risk for morbidity and mortality outcomes that persons with diabetes face is compounded by the co-existence of other independent risk factors. Forty-three percent of persons with diabetes, compared with 22% of non-diabetics, were found to be obese based on a BMI of 30 or greater. Compared to non-diabetics (25%), proportionately fewer diabetics (16%) were self-reported current smokers. However, given the risk to general health posed by tobacco, and especially to vulnerable groups like diabetics, public health action is needed to further reduce the proportion of diabetics who smoke. Sixty-two percent of Louisiana diabetics were told that they have high blood pressure, compared with 24.8% of non-diabetics, and 45.9% were told they have high blood cholesterol, compared with 27.8% of non-diabetics. Although diabetics are at higher risk of morbidity and mortality due to influenza and pneumonia, 43.5% of Louisiana diabetics reported not having had an annual flu shot, and 33.1% reported not ever receiving a pneumonia vaccine. In addition, 89.9% of Louisiana diabetics reported not engaging in regular and sustained activity, and 78.4% reported consuming less than the recommended five servings of fruits and vegetables a day.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

The prevalence of diabetes will continue to increase if the following trends continue: increase in the prevalence of obesity, individuals living longer, growth in minority populations, and persistence of socioeconomic gaps. Persons older than 44 years of age, blacks, and individuals with household incomes of less than $15,000 are at higher risk of having diagnosed diabetes.

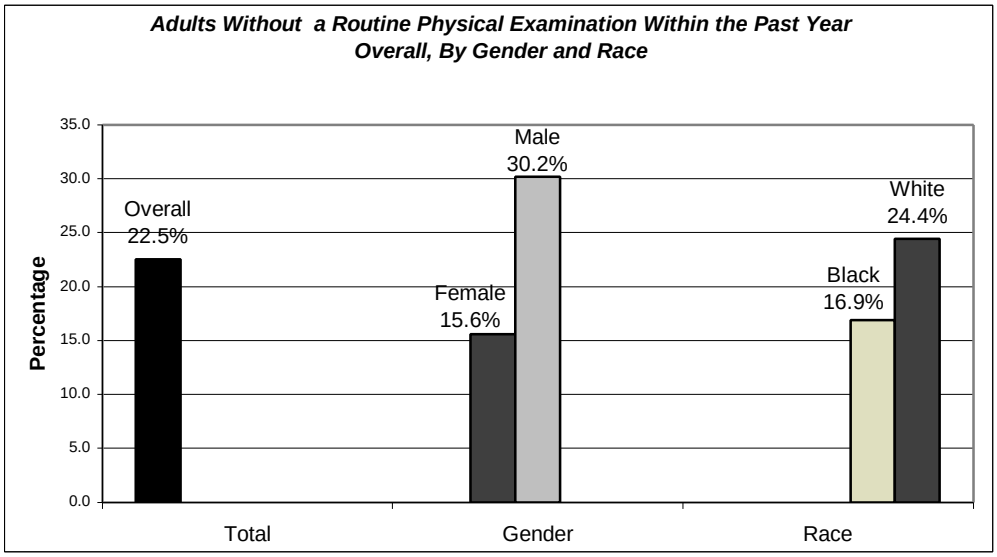
Diabetes surveillance should continue in order to: identify high-risk groups, monitor health outcomes and indicators of the quality of health care recommended for diabetics, provide data to formulate health care policy, and to evaluate progress in disease prevention and control.

## BRFSS: Preventive Health Care

### *Routine Medical Examinations*

The routine medical examinations give physicians an opportunity to assess the general health status of patients, to assess the need for screening, and to counsel patients regarding perceived issues that affect their health. Routine medical examinations are the prime opportunity to practice preventive care.

In the year 2000 BRFSS, 22.5% of the respondents reported not receiving a routine checkup within the last year. Males (30.2%) were almost twice as likely as females (15.6%) to report not having a routine checkup within the previous year. Whites (24.4%) were more likely than blacks (16.9%) to report not having had a routine checkup within the previous year.

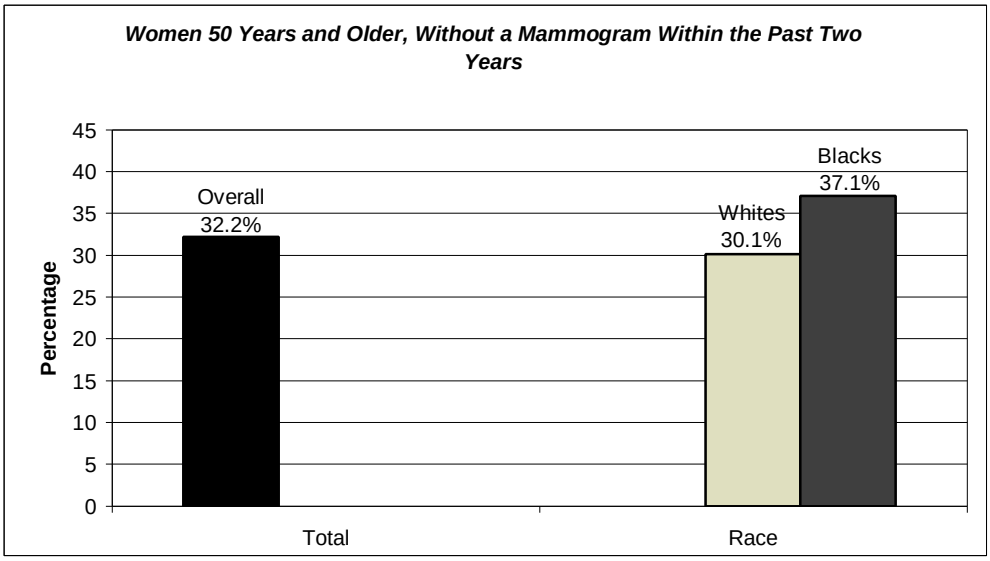



Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

### *Mammography*

Among women, breast cancer is the most commonly diagnosed cancer. Routine breast examinations by a health professional, or clinical breast examination and mammography are the most effective ways of detecting breast cancer early and improving the chances of survival. The National Cancer Institute, the American Cancer Society, and the United States Department of Health and Human Services recommend that women have a mammogram each year beginning at age 50. There is some controversy about the benefits of screening younger women.

In the 2000 BRFSS, among Louisiana women aged 50 and older, 32.2 % reported they had not had a mammogram and clinical breast exam within the two years before the survey. Blacks (37.1%) were more likely than whites (30.1%) to report that they had not had a mammogram within the last two years.




Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

***Pap Smear***

A Pap smear is used to obtain a sample of cervical cells to be evaluated for dysplasia or cervical cancer. The American Cancer Society recommends annual Pap tests for all women who are or have been sexually active or who have reached age 18. Once three annual Pap smears have been normal, the test can be done every three years unless a physician recommends more frequent testing.

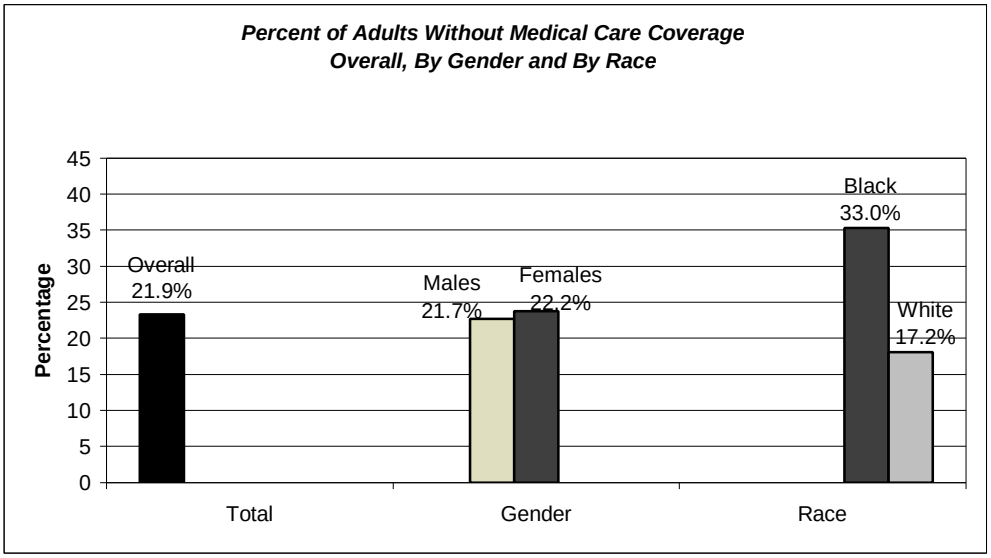
Among women who had an intact uterus (had not had a hysterectomy), 12.3% had not had a Pap smear within the past three years. White women 13.3% were more likely than black women (9.5%) to report not having had a Pap smear within the past two years.

***BRFSS: Medical Care Coverage***

Availability of health care coverage is a crucial component in an individual's access to health care. One of the goals for 2000 Health Objectives for the nation is to "improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force." Individuals without medical coverage, and even some individuals with coverage (underinsured), may not receive health care due to the cost of care. Therefore, measures of utilization of health care, including routine checkups, are dependent on coverage. The BRFSS assesses health care coverage by asking about private insurance, prepaid plans (HMOs), or Medicare.

Louisiana consistently has higher rates of adults with no health care coverage compared with the United States adult population at large.

In the 2000 BRFSS, 21.9% of Louisiana adults who were surveyed reported that they had no health care coverage. While there were no disparities between rates of no health care coverage among females (22.2%) and males (21.7%), there was a clear racial difference, blacks (33.0%) were almost twice as likely as whites (17.2%) to report a lack of health care coverage.

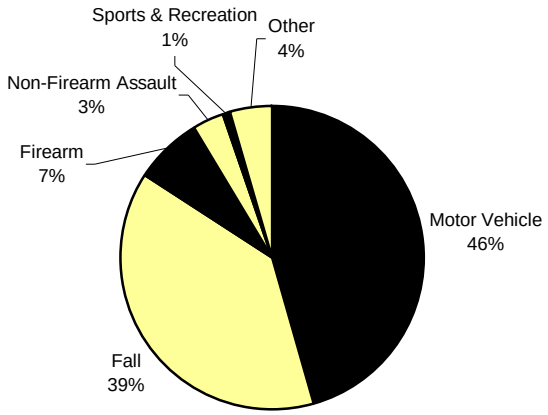



Louisiana Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

## G. TRAUMATIC BRAIN INJURY

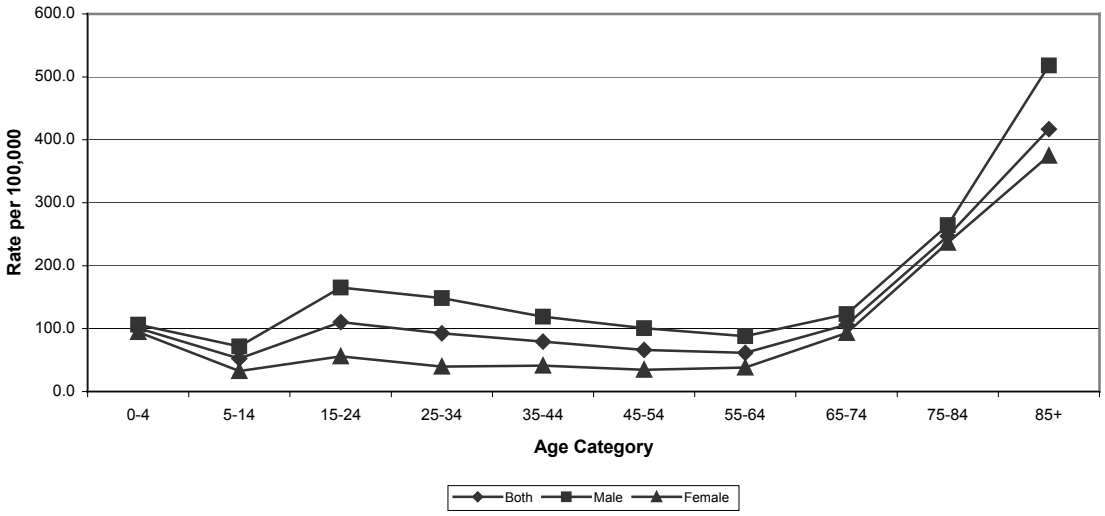
Traumatic brain injuries (TBI) are one of the most severe types of injuries in terms of both human suffering and costs to society. They are a major public health problem because of the potential for permanent disability, the high costs of acute and long-term treatment, and the fact that they occur most frequently among young adults and the elderly. Traumatic brain injury is a reportable condition in Louisiana. The first chart highlights the importance of prevention to reduce the number of TBI. For example, seatbelt use will reduce the number of motor-vehicle-related injuries, and removal of environmental hazards may reduce the number of falls. The second graph highlights the importance of targeting those 15-24 years and 65 years and older, the two age groups with the highest incidence rates.

**External Cause of Traumatic Brain Injury, LA 1999 (N=911)**




SOURCE: Louisiana Office of Public Health, EMS/Injury Research and Prevention Section

**Incidence Rates of Traumatic Brain Injury by Gender, LA 1999 (N=4049)**




SOURCE: Louisiana Office of Public Health, EMS/Injury Research and Prevention Section